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The relationship between interest in teaching as a career choice and perceptions of school/classroom environment of 7th and 8th grade students

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The relationship between interest in teaching as a career choice and perceptions of school/classroom environment of 7th and 8th grade students

by

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CHAPTER 1. INTRODUCTION

Background

There is a growing shortage of teachers of color in the profession. From 1979-1985, the number of teachers of color decreased by about 20,000 (Alston, 1988). Currently, teachers of color comprise approximately 10 to 12% of the total teaching force (Alston, 1988; Zapata, 1988). But this percentage will drop to about five by the year 2000 (Zapata, 1988; Hawley, 1989). Furthermore, the *American Teacher* survey (1988) found that 41% of the people of color in the current teaching force will be leaving the profession within five years. Twelve percent of these teachers will be leaving because of reaching retirement age (Alston, 1988).

The decline in the number of teachers of color is becoming increasingly critical as projections indicate that the students of color population will increase anywhere from 30 to 33% of the total school age population by the year 2000 (Office of Minority Concerns, 1983; Feistritzer, 1986; Zapata, 1988; Hawley, 1989). Without teachers of color, students of color will not have role models during their formative years of academic development.

Teachers of color are needed to help build aspirations and raise self-esteem of students of color. Students of color, seeing members of their own group contributing to

the larger society, will more likely develop the attitude that they, too, can become contributing and participating citizens.

With the decrease in the number of teachers of color and increase in students of color, the paramount questions in the teaching profession today are what can be done to offset the loss of teachers of color and what can be done to encourage students of color to consider the teaching profession. In addition, questions may be raised as to the reasons or motives students of color have in considering or not considering teaching as a potential profession as a means of identifying solutions or areas of concerns which need to be addressed.

Efforts have been underway at a number of higher education institutions (e.g., Bowling Green State University, University of Wisconsin-Madison, California State University at Fresno) to address the need by identifying and recruiting students of color who may be interested in pursuing a teaching career. Some of the programs begin with students from the middle school/junior high school levels (Leonard et al., 1987; Didham & Kortokrax-Clark, 1987; Post & Woessner, 1987; James & Markle, 1988; Daughtry, 1988).

Attention at the middle school/junior high school levels is appropriate since a number of studies indicate that many individuals do make their decisions to pursue a teaching career during those formative years (Fielstra, 1955; Saxe, 1969; Davis, 1984-85).

Theories of career development suggest that 11-13 year old individuals begin to fantasize and reality-test career options and possibilities, to ask questions about themselves and their future (Erb, 1983). Career interests are being formulated in light of pre-adolescents' self-evaluation of abilities and skills and self-concepts (Super, 1984).

Early adolescence is a time of change. Young individuals are experiencing physical changes; peers are becoming more important than parents and teachers (Manning & Allen, 1987).

At the school level, students are exposed to two separate curricula (Bloom, 1976) which may have impact on their career exploration and self-assessment. The manifest curriculum includes the defined set of goals, objectives, and learning activities for each of the subjects or content areas (e.g., language arts, mathematics, etc.). The latent curriculum is:

> . . . the curriculum which teaches the student who he [sic] is in relation to others. It may also teach each person his or her place in the world of people, of ideas and of activities. While the student may learn this curriculum more slowly than the other, it is likely that he will not be able to forget it as easily as he can forget the details of history, the rules of grammar, or the specifics of a subject of study in the manifest curriculum. (p. 142)

Similarly, Mergendoller and Packer (1985, p. 581) suggest " . . . that students actively interpret the social worlds of the school and classroom and that the nature of these interpretations helps structure students' actions within these social worlds." Therefore, how students behave is based on how they feel about and/or react to their interactions with the teacher: Is he/she likable? nice? mean? tough? Students develop impressions about the principal and his/her relationship to their teacher. It can be surmised that students develop many impressions about teaching in general as a result of their synthesis of the activities of the school day and school year (compare with Berry, 1986 for related discussion).

It may be suggested that anticipatory socialization is occurring during each year of a student's attendance in a classroom and school. Anticipatory socialization can be defined as the orienting and acclimating of individuals to an environment or work culture. Students see and experience daily the behaviors and actions of the teacher. They may interact with the principal and other school personnel (e.g., food service workers, secretary, bus drivers, custodians). How students feel they are treated and viewed by the school can influence how they believe and feel they fit into that environment.

Teachers can have a favorable influence on students. One study (Csikszentmihalyi & McCormack, 1986) found that 58% of their survey population of high school students mentioned one or more teachers as having made a positive difference in their lives. In addition, students "described influential teachers in terms of their ability to generate enthusiasm for learning through personal involvement with the subject matter and skill in teaching" (Csikszentmihalyi & McCormack, 1986, p. 418).

Impressions of the school environment may change from year to year, dependent, in part, on the annual experience. Other factors which may influence the students' choice of potential careers include family characteristics and environment, socio-economic level, parents' occupations/careers, and peer influence, as well as the community at large.

Much of the research on interest in teaching has focused on senior high school and college students. Data do not exist for the middle school/junior high school students and their perceptions and attitudes toward the teaching profession as a possible career choice. Without sufficient and adequate information, the aforementioned recruitment activities and efforts may be ineffective and inappropriate, and may have no long-term implications in addressing the issue. As Kemper and Mangieri (1985) stated, "It should be helpful in recruiting people to the teaching profession to know more about who is and

who is not interested in this career area" (p. 19). Knowing more about students' interest in teaching and their motives can contribute to the design of more effective programs at meeting their needs.

Recruitment efforts and services can be enhanced through understanding the nature of the relationship between the students' perception of their school/classroom environment and the selection of teaching as a career choice. Activities can focus on helping the students to clarify and understand the nature of teaching, what they like and dislike about being a teacher based on their experiences, and what they like and dislike about the school/classroom environment.

With the identification of future teacher education candidates at the middle school/junior high school level, efforts can be established to assist, guide, and mentor these students through the remainder of their school experience through high school graduation. Students with academic weaknesses and/or deficiencies can be provided opportunities to remediate and rectify prior to matriculation into high school and higher education institution.

Statement of the Problem

A major challenge facing the teaching profession is the need to develop and train quality teachers of color. The overarching question is whether the need to offset the loss of teachers of color can begin with recruitment and identification efforts at the middle/ junior high school level. Efforts currently underway appear to be superficial, and potentially, ineffective in increasing the pool of prospective pre-service teachers of color.

Data and information are required to develop effective and systematic programs to assist and develop students of color who express an interest in teaching as a potential career. There is a need to collect data at the middle/junior high school level to ascertain students' motives and considerations as they begin to formulate career options, particularly as they relate to the teaching profession.

As the Education Commission of the States (Holmes, 1989) recommended in addressing the issue of shortage of teachers of color, there is a need to:

> Identify factors that create an environment in which all youngsters prosper academically. States need to understand the limits of short-term strategies and to work concurrently on installing and following through on long-term strategies, such as early identification of potential teacher candidates. (p. 29)

Therefore, another primary consideration is how the school/classroom environment influences students in their consideration of the teaching profession. Specifically, what are the factors in the school/classroom environment which may cause students to react positively or negatively to the teaching profession.

Purpose of the Study

The primary purpose of the study is to identify appropriate data and information needed to develop and implement effective programs of recruitment for prospective teachers of color. The study examines the reasons, motives, and opinions of middle/ junior high school students in their consideration of teaching as a career choice. The

students' perceptions of their school/classroom climate are also collected to determine the relationship to their interest or non-interest in teaching. Based on an analysis of the data collected, recommendations will be proposed in the development and implementation of effective teacher development programs at the middle/junior high school levels.

Implications of the Study

The study extends the research in the area of teacher career development in its focus on the relationship between students' interest in teaching and the school/classroom environment. Previous research has considered interest in teaching as a function of individual teacher encouragement of individual students or as a career developmental process. The study attempts to determine the influence of the overall school experience on students in their consideration of teaching as a possible career.

The teaching profession is the one of the very few which has the opportunity to influence early the development of prospective future professionals. Because of anticipatory socialization and through role modelling and mentoring, potential candidates can be guided and socialized into the teaching profession. On a more direct level, the teaching profession can identify and provide early training, assistance, and support for potential candidates into the profession. If there is validity to this perspective, then the profession can devise effective and systematic means for recruitment and mentoring of prospective teachers. This is particularly important for the recruitment of people of color into teaching. Early identification, support, and assistance will ensure a greater likelihood of students of color to be academically successful and prepared.

As a result of data analysis, recommendations will be proposed as to how teacher recruitment efforts aimed at students of color at the middle school/junior high school level can be made more effective and appropriate. The results of the study may have implications for teacher education programs in terms of how pre-service teachers are trained and prepared to work in culturally diverse schools and classrooms. There are indications that teachers are not adequately prepared for such school and classroom environments (Shade, 1986).

Also, the results of the study may provide district and building administrators, and teaching practitioners, with information as to how they can improve and maintain more positive learning environments for *all* students. A better understanding of student perceptions of the school experience can lead to the development and implementation of more appropriate interventions in the school organization and classroom instruction.

Objectives of the Study

1. To collect data from 750 7th and 8th grade students on their interest in teaching as a career, their perception of teaching, and their perception of their classroom/ school experience as measured by the Interest in Teaching as a Career Choice and Quality of School Life instruments.

2. To analyze data collected based on gender, culture, and socioeconomic status.

3. To compare the results of previous studies which examined reasons for interest in teaching with the results from the present study to determine if changes have occurred.

4. To develop and propose recommendations for recruitment of students of color into teaching based on the findings.

5. To propose recommendations for possible changes in the preparation of teachers for a more culturally diverse classroom that will have a positive impact on students of color.

Scope of Investigation

School districts for inclusion in the study were selected from the state of California. As the sample involved only schools in California, generalizations to the larger population should be made with caution. The sampling frame included buildings of 7th and 8th grade students. Only buildings with a 7th and 8th grade configuration were included in the sampling frame. Buildings which included other grades were not included. This may eliminate the possible effects or impact of other grades and the school's organization and philosophy on the population of interest.

The selection of samples within the selected buildings may have been influenced by administrative exigency at the schools. The school's cooperation was very important as the time needed to complete the tasks of the survey administration may be an intrusion. Therefore, opportunity was provided to the school administration to minimize the impact the study may have.

The reliability of students' reports of parental socioeconomic status is suspect (Mare & Mason, 1981), particularly among Black students. However, reliability of socioeconomic status reports does increase with the student's age. Therefore, in addition

to information students provided concerning their parents' occupation and education, school administrators were requested to identify surveyed students as to their participation in the school lunch program. Consequently, the issue of socioeconomic status was examined in terms of level of participation in the school lunch program and parents' occupation and educational experiences. School lunch program participation is a measure of socioeconomic status as it is based on parental income.

Students were provided the opportunity to volunteer to complete the surveys. Therefore, the non-volunteering of some students may have indicated biases, issues, and concerns that cannot be analyzed.

Definition of Terms

Students of color are generally defined as individuals whose cultural heritage is non-European. For the purpose of the study, students of color will include individuals who identify themselves as Black, Hispanic, Asian/Pacific Islander, Native American, or Other. The category "Other" includes individuals who define themselves as having more than one cultural heritage.

Culture is used in the study as an encompassing term to define a student's heritage and background.

Perception is defined as the synthesis of an individual's reactions (cognitive and affective) to a given stimulus. For the study, perception of the school/

classroom experience is measured by the Quality of School Life instrument.

School experience is defined as the interaction between an individual and the various components of the educational system (e.g., teachers, administrators, curriculum, instruction).

Summary

The teaching profession is undergoing demographic changes as is the student population during the next decade and into the twenty-first century. The study attempts to ascertain whether future teachers, particularly from the student of color population, can be identified at the 7th and 8th grade levels and to determine whether their interest in teaching is related to how they feel about school. A major question of the study is whether students are more apt to consider teaching because they feel they fit into the school environment. Another question is related to the reasons or motives students presently have in their consideration of teaching as a potential career choice.

CHAPTER 2. REVIEW OF LITERATURE

Introduction

In examining the relationship between students' potential interest in teaching and their perceptions of school/classroom environment, there are three major areas of research which contribute to the rationale and theoretical bases of the study and which need to be considered. The major areas of research include who chooses to enter the teaching profession and why, school/classroom environment issues, and career decision-making processes of adolescents.

Career Choice of Teaching

Research that has been conducted to ascertain the reasons for selecting teaching as a career choice has primarily focused on college students (e.g., Fielstra, 1955; Richards, 1960; Fox, 1961; Saxe, 1969; Wood, 1978; Jantzen, 1981; Book & Freeman, 1986; Book, Freeman, & Brousseau, 1985). Similar studies on high school students have been limited (e.g., Mangieri & Kemper, 1984; Roberson, Keith, & Page, 1983). Research on younger populations and the career choice of teaching have been virtually non-existent.

Research studies have been analyzed and examined for gender differences but data have not been analyzed for racial/cultural/ethnic differences. There have been a few studies which have been focused on Black students alone (e.g., Gentry & Wen, 1988; Davis, 1984). However, studies which focus on both gender and race as they impact the choice of teaching as a career option are limited (Roberson, Keith, & Page, 1983).

Most research studies have been conducted and analyzed on issues related to the selection of teaching as the primary focus. For example, one researcher (Jantzen, 1981) has conducted research over a long period of time (years of 1946, 1949, 1951, 1956, and 1979) on reasons individuals choose the teaching profession. "Interest in children" has been consistently reported as the primary reason for both men and women. This interest has been defined in terms of helping young children (Fielstra, 1955), desire to work with children (Fox, 1961), or liking children (Haubrich, 1960).

Other researchers have categorized similar types of responses as a social service motivation (Andrew, 1983), which included "all types of altruistic formulations" (Saxe, 1969). Individuals interested in teaching have expressed an interest and concern to make a contribution to society and to help its young learn and grow (DeLong, 1987). Wright (1977) summarizes the motivation to teach:

> Altruism might seem an ideal reason for teaching. It is a strong and beneficial force which does much to keep us going in our work. But it is vulnerable in its vicarious identification with the underdog. (p. 227)

Fielstra (1955) noted that salary was toward the bottom of the list of reasons in entering teaching. Fox's study (1961) supported Fielstra's findings: only thirteen of 75 elementary education and thirty-two of 98 secondary education students felt that salary

was a significant factor. In comparing teaching and non-teaching majors, another study (Book, Freeman, & Brousseau, 1985) found that teaching majors were motivated by their desire to help others while non-teaching majors were more concerned with salaries and opportunities to apply what they had learned. Non-teaching majors also indicated that the inadequate salary of teachers was a major reason in their not considering teaching as a possible career choice.

In contrast, Bridges (1989) found that both males and females rated salary as one of the important characteristics in the selection of a career. Her study suggested that there were sex-related differences: females were more interested in helping others, while males valued financial and status benefits. Bridges concluded that females will continue to lean towards service occupations (e.g., nursing, social work, teaching).

Another major reason for considering teaching was love of subject (Andrew, 1983). This may be defined as appreciation and understanding of a particular subject matter or content area that individuals wish to convey as teachers to their students. Love of subject was particularly a strong reason among secondary education majors (Book & Freeman, 1986) as compared to elementary education majors.

In an examination of career planning from the perspective of cognitive learning styles, Witkin et al. (1977) concluded that individuals who chose to go into teaching generally have field-dependent styles. Individuals choosing teaching preferred to learn, and work, in a social context rather than in an impersonal setting with analysis and structure. However, a corollary was that field-independent females might still consider teaching because of sex stereotyping and socialization.

In identifying influences on the selection of teaching as a career, respondents in a number of studies indicated that former teachers (Fielstra, 1955; Jantzen, 1981; Saxe,

1969; Richards, 1960; Book & Freeman, 1986; Book, Freeman, & Brousseau, 1985) had persuaded and/or encouraged them to pursue a teaching career. Jantzen (1981) found in his longitudinal study the enthusiasm of a former teacher to be a major factor. His 1979 results suggested that the enthusiasm of a former teacher to be a prevalent influence on the development of future teachers.

An exception to the influence of former teachers involved students whom the researcher defined as the brightest. Berry (1986) reported that teachers recommended to their brightest students to not consider teaching. Other students, not interested in teaching, saw teaching as a low-paying job in which there is little appreciation and reward (Berry, McCormick, & Buxton, 1989).

Berry (1986) also suggested that teachers are just one aspect of the total public school experience. Taken as a whole, their experiences as students in school may be the most influential factor in students' decision to teach or not to teach. For example, students attributed the "frustrating working conditions, bureaucratic requirements, the lack of professional control, and few opportunities for intellectual growth" and their perception of teaching as a boring job as the major factors for not going into teaching (Berry, 1986, p. 269). Another study of academically talented students indicated: "Changes that might attract them to teaching included higher salaries, better organization (e.g., smaller classes, more relevant curricula), and improved status" (White, Franklin, & Lindahl, 1988-89, p. 63).

Research findings have been inconclusive concerning when individuals make their decision to enter into teaching. Jantzen (1981) indicated in his 1979 study that a predominant number of men and women made their decision in high school or in the first two years of college. Fielstra (1955) concluded that the decision was made as early as in

the elementary school years by women in his sample. Saxe (1969) verified Fielstra's earlier findings but also discovered a few men who stated they made their decision prior to their high school years. Another study (Davis, 1984-85) found that a majority of teacher education secondary students made their decision before college, and most had decided even before entering high school.

With respect to sex and culture, research studies have found that more women than men, were interested in teaching (Book, Byers, & Freeman, 1983; Roberson, Keith, & Page, 1983) and a large percentage of individuals interested in teaching were Caucasian (Book, Byers, & Freeman, 1983). A more detailed discussion on the influence of sex and gender follows in the next sections.

Overall, studies affirm that the majority of teacher education majors are generally white and female, with altruistic tendencies, and have been influenced to pursue teaching by a former teacher.

People of Color and the Teaching Profession

People of color, particularly Blacks, have generally viewed teaching as the primary means of upward mobility. In addition, teaching has been one of the few professional opportunities opened to Blacks (Tewel & Trubowitz, 1987; Spellman, 1988; Cole, 1986; Sedlak & Schlossman, 1986).

Though there have been more students of color graduating from high school currently than a decade ago (Arbeiter, 1987), the number of students of color matriculating in higher education has been on the decline. Students of color who have been completing a college degree have not majored in education (Alston, 1988). While the number of bachelor's and master's degrees in business earned by students of color

increased by 60% during the 1975-1982 period, degrees in education earned by students of color dropped 50% (20,000 to 10,000). The number of students of color earning a master's degree in education has dropped by nearly 7,000 (Alston, 1988).

Talented students of color have been considering other career options as they are no longer perceiving that they are limited to teaching as the only profession available (Reed, 1986; Waters, 1989; Alston, 1988; Roberson, Keith, & Page, 1983). Many have been opting to pursue careers in professions where people of color have been previously underrepresented, e.g., medicine, law, engineering (Beckum, 1989; Alston, 1988).

In addition, people of color have not been choosing teaching because of a variety of work-related conditions: poor pay, careerless nature of teaching, and poor working conditions (e.g., large class sizes, inadequate supplies) (Sedlak & Schlossman, 1986; Reed, 1986; Tewel & Trubowitz, 1987). Other research has suggested that the plethora of new requirements (e.g., competency-testing or standardized tests) to enter teaching have been serving as a deterrent or providing a barrier for people of color who see teaching as an even less attractive or desirable career option (Beckum, Zimny, & Fox, 1989; Waters, 1989; Gentry & Wen, 1988; Bell & Morsink, 1986).

In summary, the current outlook for people of color to enter the teaching profession is bleak and discouraging. Bright and talented students of color are seeing that they have access to other options and careers and are typically not pursuing careers in education. Additional requirements for entry into the profession of teaching are perceived as barriers.

Women and the Teaching Profession

For women, teaching has been seen as one of the few professions opened to them, if they choose to pursue a professional career (Gerstein, Lichtman, & Barokas, 1988; Beckum, 1989). From an historical perspective, women have entered teaching as men were able to obtain other jobs and careers because of industrialization (Apple, 1985). As teaching has been perceived to be a nurturing and caring profession, both men and women still view it as a natural career for women. In spite of expanding opportunities for women, they still continue to choose careers traditionally female and low-paying (Fouad & Kammer, 1989).

Though caring and nurturing have been seen as important functions within the American society, especially if they are in the home carried out by women, occupations which require these functions have been rated as having low prestige, primarily because women have entered those occupations (Brabeck & Weisgerber, 1989). This has been one explanation offered for why teachers' salaries are not higher.

For women, socialized into stereotypic sex roles, teaching has been perceived as being desirable because it provides a nine- or ten-month job with summers off so that they can establish, maintain, and manage a family household. In addition, women, socialized to traditional female roles, view teaching as a job which allows for them to stop teaching, rear a family, and re-enter teaching at any time (Miller, 1986).

The desire for flexibility in work scheduling and the ease of re-entering the field has been substantiated in a study conducted to compare job values held by women and men (Bridges, 1989). The study also found that women look for work in which there is "opportunity to help others." Differences in work values held by men and women have been accounted for by differential socialization (Beutell & Brenner, 1986).

Thus, it appears that women will continue to seek careers in the traditional service occupations (i.e., nursing, social work, and teaching). Because of socialization by gender, women will continue to consider careers where they do not feel they will have to sacrifice the so-called feminine role of caring and nurturing (Miller, 1986). However, a study has found that women who choose to enter the same traditional careers may not necessarily have the same socialized sex-role orientation (Fouad & Kammer, 1989). Therefore, even if a woman has been socialized in non-traditional ways may opt to choose a traditionally sex-typed career.

As long as teaching is viewed primarily as a nurturing and caring profession which permits flexibility in scheduling and is relatively easy to re-enter, it appears women, who are socialized into the sex role stereotypes, will continue to pursue careers in teaching.

School Climate/Classroom Environment

The concept of school/classroom climate is attributable to the works of Lewin and Murray who first suggested a relationship between an individual and his/her environment. Lewin (1936) proposed that one's behavior is a function of the interaction between the individual and the environment as illustrated by his model, $B = f(P, E)$. Murray (1938) purported how an individual's needs may be met or hindered by the environment. Chávez (1984) has provided an historical account of the research interest in this area: examination of teacher-to-student and student-to-teacher interactions.

Classroom environment has been defined as the shared perceptions of the students

and teacher in that environment (Fraser, 1987); the learning environment that is created by the teacher (Hallinan & Smith, 1989). The school climate has been defined as encompassing the school's academic norms, expectations, and beliefs (Brookover et al., 1978).

Early research conducted has focused on the effects or influences on teachers on students, particularly as they relate to student achievement (Brophy, 1979; Brophy, 1986; Fisher & Fraser, 1986; Fraser, 1989). Much of the earlier results and conclusions have been based on observational data, or low inference data that suggest certain limitations in interpretations (Fraser, 1986; Chávez, 1984). Chávez (1984) discussed the advantages and disadvantages of collecting and analyzing high and low inference data.

Other studies have examined the influence of teachers on students in general (Entwisle & Hayduk, 1988; Csikszentmikhalyi & McCormack, 1986). *Pygmalion in the Classroom* (Rosenthal & Jacobson, 1968) has been the seminal study of the direct effects of teachers on students in its examination of teacher expectations and its impact on students. The study determined that teachers treat students differently, based on their expectations of students on the basis of a variety of student background factors, e.g., gender and/or ethnicity, socioeconomic status (McCormick & Noriega, 1986; Newmann, Rutter, & Smith, 1989; Dusek & Joseph, 1983; Brophy & Good, 1970).

An examination of the research has also indicated that the academic, and perhaps social, failure of students of color in schools may be attributable to teachers who attempt to fit the students into the teacher's frame of reference rather than the teacher expanding their own perspective (Burstein & Cabello, 1989). Students of color typically come to schools with a different set of experiences and expectations which is not understood nor recognized by Caucasian teachers. Thus, incongruence in the person-environment fit can create dysfunctionality.

Classroom environment has been researched as having differences based on the field of study being taught (Astin, 1965). Though the study focused on the college level, it determined that the field of study (e.g., accounting, biology, history) also has an effect on the behavior of both the instructor and the student.

Classroom-environment studies have examined teacher-student and student-student (e.g., Hallinan & Smith, 1989) relationships and interactions. School-climate studies (e.g., teachers' relationships with peers and other school personnel) have remained the purview of educational administration who has viewed them as formal organizational issues (Docker, Fraser, & Fisher, 1989; Fraser, 1989).

Another perspective on classroom environment has been proffered by Anyon (1980). His research suggested that different types of schools exist based on the social status of their clientele and that these differential types impact the educational development of students. Each of these types of schools can have either a limiting or enhancing quality on the future careers students may opt to enter. Anyon suggested that schools can be defined as working-class, middle-class, affluent professional, or executive elite.

The socioeconomic status of the local neighborhood determines the nature of the class work that is done (Anyon, 1980). Furthermore, the expectations of the students held by the school, primarily its faculty, is similarly determined. Anyon's work has provided support for Bloom's hidden curriculum at work (Bloom, 1976). It has been suggested that schools are the first societal institutions, outside of the family, which provide students with an initial glimpse of their life's prospects (Grant & Sleeter, 1988; Jackson, 1968).

Examination of the school climate in terms of the degree of alienation felt by students and teachers in relation to different school issues (e.g., control over curriculum,

institutional affiliation) (Newmann, Rutter, & Smith, 1989) suggests the degree of satisfaction and commitment to the school. This is translated into performance and achievement, or the lack of same. The school's social climate can have an impact on academic achievement as demonstrated by Brookover et al. (1978) in their study of elementary schools.

Another study examined the effects of the high school context (defined in terms of ability and socioeconomic status) on students' development of college plans and occupational aspirations (Alwin & Otto, 1977). The study's findings suggested that the school's socioeconomic context and ability context are correlated to students' occupational aspirations.

There are a number of ways to view school/classroom environments. One is in terms of the immediate impact the classroom environment has on academic achievement as it has been discussed. Another aspect is with regard to the long-range effects the classroom environment has on students (Entwisle & Hayduk, 1988; Epstein, 1983). Epstein (1983) suggested that how students feel about school in their early years and their current experiences in school, as well as their current success in school, influence their current attitudes about school. In addition, Epstein (1983) offered a possible explanation for the decline in interest in teaching as a career option in that it may be due to differences in what schools and families expect and value.

Another area of research has involved focusing on classrooms as a place of work metaphor. Typically, this perspective has looked at the roles of the students and teacher in a vein similar to that of a factory; e.g., what the students learn is work and how the teacher teaches is management. Marshall (1988) summarized the different types of research that have been conducted using this metaphor. The implication of the meta-

phoric approach in these studies is that, if students enjoy the tasks of the classroom or can see themselves in the role of the teacher, then they might be more inclined to consider teaching as a career option.

The crux of the examination of the classroom/school environment vis-à-vis teaching as a career option is the notion of congruence between the individual and the environment, or the person-environment fit. There is evidence to suggest individuals who feel comfortable and secure in an environment do perform better academically and are generally happier. Students, who perceive that their teachers expect high achievement, feel that they belong, believe in the goals of schooling, and can be capable individuals in that environment.

Relation between School Experience and Career Choice of Teaching

Presently, studies do not exist to establish a direct relationship between a student's school experience and the choice of teaching as a profession. However, this relationship may be inferred. Hatton (1988) states "teaching differs from other professions in that everyone who has ever gone to school has seen firsthand the . . . conditions teachers face" (p. 69). This suggests the potential effects of anticipatory socialization in the development of prospective teachers. It has been posited that children, even before entry into school, can describe what a teacher is (Ciscell, 1987). Lortie (1975) summarized the views of sociologists that schools are the socialization agency with the responsibility of preparing students for adult roles in society. Consequently, the roles some students may opt to choose may involve being a classroom teacher.

It would seem reasonable to suggest that if an individual accepts the norms and roles of an organization, there is a greater likelihood of that individual choosing to

become a participant and contributor within that organization. After so many years and hours in the classroom, prospective teachers are developing many of the behaviors of their own teachers (Ost, 1989, p. 164). This conditioning and accepting of schools as they are may account for the conservative nature of schools (Lortie, 1975). Individuals who opt to teach because they like the environment of the school are less likely to advocate changes.

As Poole and Cooney (1985) suggested, "it is possible that what occupations people know about or perceive as possible for self (or both) are heavily influenced by their environments, since environments influence both the self-conceptions of adolescents and the types of occupations they see in their own surroundings." Schools may provide an anticipatory socialization effect (Blau, 1988) in which students learn, directly and indirectly, the realities of the school organizational life, particularly if effective teacher role models and mentors exist.

Aside from the effects of the manifest curriculum (Bloom, 1976), schools can influence heavily the type of careers students will consider in other ways. Anyon (1980) suggested that the dominant socio-economic status in a community determines the nature of the work done in schools and classrooms. In what Anyon defined as a Working Class school, his study found learning involved the memorization of procedures with little or no discussion as to the context. In a Middle Class school, learning was getting the right answer and students were encouraged and directed to perform some kind of low level thinking skill. In an Affluent Professional school, students were involved in learning activities that prepared them to be independent and creative. In the Executive Elite school, learning essentially enhanced the development of "analytical intellectual powers." Consequently, students are learning in their respective schools, the kinds of behaviors

that will be suitable for the type of work they will assume some day.

Different ethnic groups may have different perceptions of a mutually experienced school environment as exemplified by a study of multiethnic middle schools in Brooklyn, New York (Strodl, 1988). One of the findings of the study purported that ethnicity and socioeconomic status were more important in determining differences in perceptions than ability.

The relationship between student values and values of the school as an institution revealed that this relationship is not independent of each other (Craig, 1989). In other words, the values of the school can influence student values. The study found that students who scored high on the Quality of School Life instrument may have values that are close to those of the teachers and principals. In a study to establish validity of the Quality of School instrument, the developers concluded, "students who report high satisfaction with the quality of their school experiences are those who are comfortable with the demands (regulations for behavior) and opportunities (participation) of the school setting . . . ." (Epstein & McPartland, 1976, p. 20).

In conclusion, if students have a highly positive perception of their school experience, there may be a greater likelihood of selecting teaching as a profession. A highly positive perception may be an indication of greater socialization into the school environment, and by implication, in selecting teaching as a potential career option. A high correlation between perception of the school experience and teaching is an indication of person-environment congruence (Hildebrand & Walsh, 1988).

Teacher/Student Expectations

Previous studies found that individuals entered the teaching profession as a result

of encouragement from teachers. Such encouragement is possibly related to another major classroom dynamic—teacher and student expectations.

Pygmalion in the Classroom (Rosenthal & Jacobson, 1968) has provided the initial impetus in studying the area of teacher expectations. The basic premise is that what teachers expect, based on their own accurate or inaccurate perceptions of their students, is what will result in student behaviors. Teacher expectations of their students translate into reality; students begin to behave as they are expected. Teachers themselves also behave differently. They do not demand as much of students they do not expect to perform, while they create more opportunities for participation and success for students they do expect to function well.

Research has also found that there is differential teacher expectations of students based on gender and ethnicity (Dusek & Joseph, 1983). For example, there was a high correlation between students' academic performance and teachers' expectations in junior high schools (Clifton et al., 1986). This study concluded that teachers have lower expectations of students of color and male students.

What students expect of themselves and their own abilities have similar effects and impact (Berndt & Miller, 1990); that is, their achievement is strongly related to their own expectations for success. However, this has not been found to be universally applicable. Elementary students from lower socioeconomic status have been found to have an over-inflated set of expectations (Entwisle & Hayduk, 1983) which does not translate into academic success. What may intervene in the determination of student self-expectation is the influence, or lack of influence, from their parents. Parents from middle class situations help their children develop more realistic self-appraisals.

These differences are not necessarily the result of differential value assigned to

schools by low-income students (Brantlinger, 1990). Though they may not achieve and have as positive an experience in school as their middle-class counterparts, low-income students see an overall benefit of having education (e.g., diploma) on their lives.

Another perspective suggests that where students perceive themselves to be in the social system of the classroom may impact how they learn (Cohen, 1972). Student's status is determined by their ascribed social statuses (gender, race/culture), their achievement status (how they perceive themselves academically), and their perception of their social power (student interpersonal relationships) in the classroom.

In summary, teacher and student expectations are related to how well students may perform academically. There is differential expectations and treatment of students based on gender and racial/cultural characteristics. Students have different perceptions of their place in the classroom and school which can impact how well they see themselves fitting into the educational environment. For the purposes of the study, this suggests that students, who do not experience or perceive congruence in the school setting, are not apt to consider teaching as a viable career option.

Career Planning and Adolescence

The major aspects of career development theory applicable in the study are the development and clarification of career interest in early adolescence and the importance of person-career fit as it relates to the work environment.

A major theoretical component in the study involves career development theory. An understanding of career development and planning is essential to validate career

choice as viable and feasible, particularly at the age levels of the students in the study. There are presently four main approaches to career theories that have been developed to provide explanations for career decision making and choice (Osipow, 1990): developmental, trait-oriented, reinforcement-based, and personality-focused.

The developmental approach is represented by Donald E. Super (1984). Super suggested that the career a person chooses is an expression of one's self-concept or implementation of their concept of self. More critically, the more positive one's self-concept is, the greater the likelihood of individuals having career goals.

John Holland's theory of vocational choice (1973) typifies the trait oriented approach. Holland theorized there are six personality types and occupational environments which were defined as realistic, investigative, artistic, social, enterprising, and conventional. His primary premise was that individuals will select careers which best match their personality type with the occupational environment. Holland's types are not mutually exclusive in either one's personality or the occupational environment. There may be a dominant orientation, along with one or more others.

The reinforcement based approach is developed along the lines of the Social Learning theory (Osipow, 1990). The person-environment interaction is emphasized in that individuals receiving positive reinforcement in particular settings will more likely develop the attitude and behavior patterns of that setting. In addition, the reinforcement based approach suggests that a wider variety of people, besides parents, can influence the career development of individuals.

The personality focused approach looks at the relationship between a person's work personality (e.g., attitudes, values, needs, abilities, skills) and the work environment (Osipow, 1990). Ideally, there is a strong correspondence between a person's work

personality and the work environment. The approach focuses on specific abilities of a person and how they relate to the requirements of a job. Close correspondence suggests worker satisfaction and stability over time. In many respects, the approach is similar to the person-environment fit.

Early adolescence is a critical time in one's life vis-à-vis career and life planning readiness (Erb, 1983; Campbell & Parsons, 1972). Students in middle or junior high schools are experiencing many personal changes, asking questions, and eager to learn about themselves and their abilities (Cole, 1982). Though the decisions made at this point in their lives are by no means firm, students do begin to establish a pattern for the next few years in their academic and extracurricular activities. For example, as they enter high school, their preliminary career and occupational plans will probably determine the high school curriculum they will initially pursue (e.g., college preparatory, vocational programs), assuming that they have consciously begun such deliberations.

However, career and life planning readiness is not universal. Sampling students from across the United States, Campbell and Parsons (1972) found in their study that nondisadvantaged junior high school students have higher vocational maturity and occupational aspiration scores than their disadvantaged counterparts.

Career development is either enhanced or impeded by various forces external to the individual; e.g., parents, family socioeconomic status, social factors, exposure to and experience with workers from different occupations (Martin, 1991; McKenna & Ferrero, 1991; Lee, 1984). A longitudinal study found that junior high students, regardless of gender, race, or socioeconomic status, have fairly high aspirations but given the nature of their schooling (e.g., lack of counseling especially if they opt for a noncollege goal, unchallenging academic work), family background (low socioeconomic status), and the

local economy, these high aspirations became unfulfilled dreams (Grant & Sleeter, 1988).

There is evidence that career decision making continues to be gender-bound (Beutell & Brenner, 1986; Subich et al., 1986), even in early adolescence (Stockard & McGee, 1990; Erb, 1983). Men and women select occupations perceived to be appropriate for the respective genders (Stockard & McGee, 1990; Leong & Hayes, 1990). With regard to the teaching profession, more women continue to choose to be elementary school teachers than men. A study on nontraditional occupations listed teaching as a nontraditional occupation for men (McKenna & Ferrero, 1991).

Another aspect of career development studies examines teachers who remain or leave the profession. The contribution of these studies is the possibility of identifying characteristics or traits that may lead to success or nonsuccess; retention or attrition. One study examining why teachers leave the profession found that those who left have an investigative personality type (per Holland's model), while those who remained in teaching have a combination of social, artistic, and enterprising personality types (Chapman & Hutcheson, 1982). Furthermore, teachers who left teaching assign greater importance to salary increases and job autonomy while those who remain indicate greater importance to recognition by others. The dominant orientation of teaching is social (Schuttenberg, O'Dell, & Kaczala, 1990). Therefore, to be a teacher who will remain in the profession, the individual is primarily social oriented, is interested in developing new approaches, and has good planning and organizing skills.

A study examining job satisfaction among teachers concluded that there is a high correlation between an androgynous sex-role self-perception and high levels of satisfaction in teaching (Schuttenberg, O'Dell, & Kaczala, 1990). The androgynous

behaviors included an expressive orientation, an affective concern for the welfare of others, and great behavioral flexibility.

Summary of the Review of Literature

The review of literature supports the possibility that there is a relationship between interest in teaching as a career choice and the perception of school/classroom climate. The relationship may be the result of anticipatory socialization into the teaching profession as schools and classrooms have been found to influence students. Teachers have been found to be influential both directly and indirectly on how students feel about themselves and their abilities. Consequently, students may develop positive or negative perceptions of the school environment and how congruent or incongruent they feel they are in it. Factors, from outside of schools, influence students as exemplified by the notion of altruism and its relationship to interest in pursuing teaching and the socialization process which continues to sex stereotype individuals in career explorations. Students from the ages of 10-14 are at a point in their life when they are ready and eager to explore different possibilities and their own capabilities and interests.

CHAPTER 3. METHODOLOGY

Research Methodology and Procedures

The study was a non-experimental design as it did not involve the manipulation of and control over an experimental environment (Keppel & Zedeck, 1989). In addition, the study was exploratory in nature in its attempt to ascertain whether or not students' perception of their school/classroom environment has an influence in students' consideration of teaching as a career choice. The major methodology used in the study is survey research. The study was primarily interested in the association and strength of the dependent variable and independent variables under examination (Keppel & Zedeck, 1989).

The study utilized surveys for data collection. The primary purpose of survey research is to collect data on specific characteristics of a large group of persons, objects, or institutions (Jaeger, 1988). The subjects, for the study, consisted of seventh and eighth grade students and the data collected described students' feelings about their school, opinions about teaching, and interest in teaching as a potential career choice.

The survey instruments collected data on seventh and eighth grade students' interest in the profession of teaching as a career choice and students' perception of their school experience as measured by the Interest in Teaching as a Career Choice and the

Quality of School Life instruments, respectively. Finally, the data were analyzed to determine if there was a relationship between students' interest in teaching and students' perception of their school experience.

The survey instruments utilized (Quality of School Life and Interest in Teaching as a Career Choice) can be classified as high inference measures. A major component of high inference measures includes a rating system that requires an inside observer. In the study, the student was asked to serve as the inside observer "to make an inference from a series of classroom events using specific constructs such as satisfaction, cohesiveness, etc." (Rosenshine & Furst, 1971). Low inference measures are primarily characterized as having an outside observer keep frequency count specific classroom behaviors.

High inference instruments have been able to provide useful data in studying the potential impact of the environment on participants, or students (Chávez, 1984). A potential limitation of high inference instruments may be whether or not the student is willing to disclose actual or real data (Nunnally, 1964). Therefore, reliability of the results may be questionable.

A number of advantages has been enumerated in using high inference measures over observation techniques to assess the school or classroom climate (Fraser, 1986). Survey instruments are found to be more economical since observation techniques require the expense of observer training. The results from survey instruments reflect the collective judgment of a number of individuals as opposed to that of one observer. Student perceptions are considered to be more useful in examining their behavior than observations. Observational data are filtered through the eyes and personal experiences of the observer (Nunnally, 1964), whereas students can report more directly on a survey. Perceptual measures can account for greater variance in student learning outcomes than

directly observed variables (Fraser, 1986). Moreover, observations generally are conducted in short time periods which may not be reflective of the total class/school experience.

Students can be considered to be a viable source of data as they have been in many different classroom environments and have spent many hours therein and can probably form fairly accurate impressions (Moos & David, 1981). Therefore, for the purposes of the study, it can be inferred that students have developed an impression of the teaching profession as a result of the years of observation and direct experience and that students' impressions can be measured.

Instrumentation

The study used two survey instruments. One questionnaire was primarily based on instruments initially developed and utilized in a 1983 study conducted by Mangieri and Kemper to determine students' interest in teaching as a career. In this and other studies, the survey populations were high school-aged students. For the purpose of this study, modifications were made to insure language and content understanding for 7th and 8th grade students.

The Mangieri and Kemper (1983) survey directed students to respond to different sets of statements depending on how they responded to an initial question. The modified questionnaire, Interest in Teaching as a Career Choice (hereafter referred to as Interest in Teaching) required students to respond to the same set of statements. Therefore, comparisons to the same statements by students who indicated interest or non-interest in

teaching could be analyzed. In addition, the instrument was modified to include questions to establish the students' socioeconomic status and questions regarding career planning and thinking.

The second instrument used was the Quality of School Life (hereafter referred to as QSL; see Appendix A for a copy and discussion of the instrument) developed by Epstein and McPartland. The purpose of the QSL is to derive a "multi-dimensional measure of student reactions to school in general, to their classwork and to their teachers" (Epstein & McPartland, 1978). The developers reported that the Kuder-Richardson reliability of the QSL was 0.87 for secondary students and 0.89 for elementary students (Epstein & McPartland, 1978). The reliability coefficients of the QSL have been determined to be within acceptable limits (above 0.70 as per Borg & Gall, 1979). The developers administered the QSL instrument to 5th, 6th, 7th, 8th, 9th, and 12th grade students to establish validity and reliability.

Pilot Study

To establish the reliability of the Interest in Teaching as a Career Choice instrument, a pilot study was conducted with seventh and eighth grade students at a school in Ogden, Utah. Test-retest reliability was used to determine the reliability coefficients for the instrument.

Administration instructions and procedures for both instruments were evaluated for ease of use and understanding. The length of time for completion of both instruments was determined as well as a compilation of questions students raised concerning the

survey questions. The main question asked by students concerned the meaning of a word or what should they write if they did not know their parents' occupations.

The first administration occurred on February 22, 1991 and the second administration took place on April 5, 1991 at a middle school in Ogden, Utah. During the first administration, the Quality of School Life instrument was also given. As reliability for the QSL had been previously determined, the data collected were used to establish the statistical analysis procedures.

A total of 104 7th and 8th grade students completed the Interest in Teaching instrument at the first administration. The second administration, which occurred forty-two days later, yielded eighty-five (85) respondents. The difference in the number of respondents between the two administrations were the results of absences from school or students leaving this particular school.

Results of the Pilot Study

To examine the reliability of the Interest in Teaching survey instrument, correlation coefficients were obtained to examine the relationship between respondents' responses to both administrations. The correlation coefficients that resulted, using the CORRELATIONS command in the Statistical Package for the Social Sciences (hereafter referred to as SPSS), are shown in Table 3.1. Missing values were not included in the computation; that is, if a respondent did not make a selection to a question in either or both administrations, it was not included in the analysis.

A Cronbach reliability analysis of the Interest in Teaching instrument was also

Table 3.1 **Test-Retest Correlation Coefficients — Pilot Study**

(I1a) a Math/Arithmetic teacher	0.6357**
(I1b) a social studies teacher	0.5198**
(I1c) an English teacher	0.4567**
(I1d) a science teacher	0.3389**
(I1e) a P.E. (gym) teacher	0.5588**
(I1f) a music/art teacher	0.4922**
(I1g) an elementary school teacher	0.5939**
(I1h) a middle/junior high school teacher	0.6490**
(I1i) a high school teacher	0.4118**
(I1j) a ??? teacher	0.4827**
(I2z) I would like to become a teacher	0.5312**
(I1) I would like to make a lot of money	0.2660*
(I2) Teachers get a lot of respect from students.	0.4222**
(I3) People don't think teachers are very important.	0.1290
(I4) I would like very much to teach children	0.5620**
(I5) Teachers get many promotions	0.4472**
(I6) It would cost too much to go to college to be a teacher	0.2879**
(I7) I really don't want to work with people	0.2284*
(I8) I would like to work for 12 months a year	0.5210**
(I9) Teachers don't have a lot of problems with students	0.2171*
(I10) My friends don't think I should be a teacher	0.1763
(I11) My family thinks I should be a teacher	0.4602**
(I12) Teachers make a lot of money	0.6736**
(I13) I would not like to work for just 9-10 months a year	0.0919
(I14) I would really like to be a teacher	0.5477**
(C1) Have you thought about what you will do when you are done with school?	0.3593**
(C2) Have your teachers talked with you about careers, occupations, and jobs?	0.4304**
(C3) Has your family talked with you about careers, occupations, and jobs?	0.4348**
(C4) Do you and your friends talk about careers, occupations, and jobs?	0.4626**
Your race/ethnicity	0.8631**
What is your grade average in school	0.7877**
Check how much education your mother has had	0.7995**
Check how much education your father has had	0.8757**

** $p < .01$ * $p < .05$

conducted on both administrations to establish internal consistency. The Cronbach reliability alpha for the first administration was 0.6043 (standardized alpha = 0.6471). The second administration produced a Cronbach reliability alpha of 0.5533 (standardized alpha = 0.6399).

Discussion of the Pilot Study

One explanation for the low correlation coefficients is that while the first administration was conducted in individual classrooms where the largest number of students was about thirty sitting at individual desks, the second administration was conducted in one large room where groups of students shared the same writing surface. Thus, some of the responses may have been biased by peer influence. The reason for the difference in the two administrations was administrative convenience. The first administration of the instrument included the administration of the Quality of School Life to the total school population. The second administration involved only those students who complete the Interest in Teaching instrument. Therefore, it was not possible to replicate similar conditions in the two administrations.

In addition, many of the questions are opinion-based and student attitudes are subject to change during the intervening time period (42 days) between administrations (Jolliffe, 1986). For the 11-12 year old age group, stability of opinions may vary from day to day. This was not the case with questions involving demographic data: culture (0.8631), average grade (0.7877), mother's education level (0.7995), and father's education (0.8757).

One category of questions which proved to be unproductive involved asking the students to write down their parents' occupations. Written responses were inconsistent. Some students wrote down the place of work for parent occupation. Many were not able to indicate the job title held by parent(s). Many were unable to complete this question. It was interesting to note that if parents held professional positions (e.g., doctor, lawyer, teacher), students could indicate these categories of careers.

In establishing the reliability, it was important to review the number of missing responses for each statement in the instrument. A few statements produced five (5) missing responses, but the majority of statements had fewer than five. The low number of missing responses can be interpreted to mean that the statements were not ambiguous for the students to consider and that it was possible for them to indicate a response.

Finally, the Cronbach reliability alpha obtained in both administrations (0.6043 and 0.5533, respectively) was slightly below the acceptable level of 0.70. The major statements of the study which were related to interest in teaching produced acceptable Cronbach reliability alphas on the two administrations (0.7998 and 0.7923, respectively).

Therefore, it was concluded that the Interest in Teaching instrument was sufficiently reliable to use in the study.

Data Source and Collection

The study's survey sample was obtained from school districts in California. California was primarily selected because of its large diverse student population. Names and addresses of buildings which contained only the 7th and 8th grades were obtained

from the *California Public School Directory* (1990) to establish the sampling frame. Buildings were then randomly selected from within the sampling frame.

When the buildings were identified, building administrators were contacted by letter and apprised of the needs of the study to solicit their support and cooperation for the study. Building principals, willing to have their school participate in the study, completed and returned a Consent Form (letters and forms utilized in the study are in Appendix B).

Of the 30 school buildings randomly selected to participate in the study, eight responded positively and their students provided the responses to the survey instruments. Reasons were not known for schools' decision not to cooperate in the study, therefore, it is uncertain how the responses of their students might have effected the results of the study. Therefore, caution is advised regarding the generalizability of the results.

Survey administrators, if different from the building principal, then selected equal number of classes of 7th and 8th grade students to complete the surveys. The survey administrators identified an optimal time of the day when the survey instruments could be administered. Upon completion of the surveys and related forms, survey administrators returned all items.

The instruments and procedures of the study were reviewed and approved by the Human Subjects Review Committee of Iowa State University.

Data Analysis

The data collected were entered and analyzed using SPSS. A Frequency procedure was initially run to provide general demographic data. The OneWay ANOVA, ANOVA, and Discriminant procedures were utilized to test the null hypotheses in the study. A Regression procedure was run to develop a statistical model. These data analysis strategies were considered the most appropriate for non-experimental designs (Keppel & Zedeck, 1989).

For hypotheses one through four and six, Interest in Teaching scale was the dependent variable. Independent variables included gender, culture, and QSL (not all the named variables were used in every hypothesis-testing). For hypothesis five, the categorically grouped QSL scale was the dependent variable and culture was the independent variable. For hypothesis six, the degrees of agreement with the reasons, motives, or opinions (statements I1 to I13 from the Interest in Teaching instrument) were the independent variables and the Interest in Teaching scale was the dependent variable. For all the hypotheses in the study, results were determined to be statistically significant if the probability was less than .05 ($p < .05$).

Description of the Survey Population

Presented in this section is a discussion of the variables examined in the study. Table 3.2 provides the demographic characteristics of the survey respondents which served as independent variables (except for grade level).

Table 3.2 **Demographic Characteristics of Respondents**

Gender	N	Percentage
Boys	321	49.7
Girls	325	50.3
Total	646	100.0

Grade	N	Percentage
7th	260	40.2
8th	386	59.8
Total	646	100.0

Culture	N	Valid Percentage
Asian	62	9.6
Black	26	4.0
Hispanic	70	10.9
Native American	20	3.1
White	395	61.3
Other	71	11.0
missing	2	

School Lunch Program Participation	N	Valid Percentage
Free	105	18.4
Reduced	45	7.9
None	420	73.7
missing	76	

Average Grade	N	Valid Percentage
A	171	27.3
B	297	47.4
C	125	20.0
D	25	4.0
F	8	1.3
missing	20	

Participate in Extracurricular Activities	N	Valid Percentage
Yes	399	62.1
No	244	37.9
missing	3	

Table 3.2 **(continued)**

Mother's Education	N	Valid Percentage
Did not graduate from high school	66	11.2
High school graduate	168	28.4
Completed some college	187	31.6
Four-year college graduate	170	28.8
missing	55	

Father's Education	N	Valid Percentage
Did not graduate from high school	50	8.9
High school graduate	149	26.6
Completed some college	153	27.3
Four-year college graduate	208	37.1
missing	86	

The distribution of students between males and females was relatively equal (see Appendix D for comparison of sample totals with population totals). Students of color, as identified by self report, comprised 39% of the total sample (see Appendix E for comparison of sample totals with population totals). The category of "Other" included students who indicated more than one cultural heritage. The survey sample has relatively high academic ability as 74.7% indicated their average grades in school are "A" or "B." The students were from families with strong academic backgrounds as they indicated 60.4% of mothers and 64.4% of fathers had attended college. As an indicator of

socioeconomic status, 73.7% of the students noted they did not qualify for participation in the free or reduced lunch program (see Appendix F for comparison of sample self-report and overall lunch participation data reported by the schools). The high number of "missing" from this item (total of 76) was primarily from one (42 missing) of the schools. Sixty-two percent of the students indicated they were active in extracurricular activities at their schools.

Interest in Teaching as a Career Choice Instrument

The Interest in Teaching as a Career Choice instrument collected data on students' present level of interest in teaching as a career possibility. The instrument also collected data on students' opinions on various issues related to the teaching profession (e.g., salary, teacher-student interactions).

The responses in Table 3.3 reflect students' levels of agreement (strongly agree, agree, no opinion, disagree, strongly disagree) with different issues related to the teaching profession. The individual responses to the statements served as independent variables in the testing of hypothesis six in the study.

The statements from the Interest in Teaching instrument examined students' level of agreement with reasons and motives in considering teaching as a career choice, and opinions about teachers' work situation. The statements are reflective of many of the issues and concerns researched in other studies of older individuals' (e.g., collegiate level) considerations to enter the teaching profession.

As previous studies (Book, Freeman, & Brousseau, 1985; Bridges, 1989) have indicated, salary is an important issue in career planning for some and not for others. The following statements provide an indication of 7th and 8th grade students' reactions to the

Table 3.3 **Students' Views on Teaching**

Statement (variable name) Mean and Standard Deviation	Strongly Agree (1)	Agree (2)	No Opinion (3)	Disagree (4)	Strongly Disagree (5)	missing
I would like to make a lot of money (I1) 1.384 0.598	435 67.4%	173 26.8%	36 5.6%	1 0.2%	0 0.0%	1
Teachers get a lot of respect from students (I2) 3.250 0.940	14 2.2%	121 18.8%	258 40.1%	190 29.5%	60 9.3%	3
People don't think teachers are very important (I3) 3.304 1.060	34 5.3%	112 17.5%	198 30.9%	219 34.2%	78 12.2%	5
I would like very much to teach children (I4) 3.237 1.216	52 8.2%	134 21.1%	183 28.8%	145 22.8%	122 19.2%	10
Teachers get many salary raises (I5) 3.530 0.888	12 1.9%	27 4.2%	317 49.8%	172 27.0%	108 17.0%	10
It would cost too much to go to college to be a teacher (I6) 3.243 1.053	37 5.8%	99 15.5%	257 40.3%	160 25.1%	84 13.2%	9
I really don't want to work with people (I7) 4.128 0.925	12 1.9%	17 2.7%	115 17.9%	230 35.9%	267 41.7%	5

Table 3.3 **(continued)**

Statement (variable name) Mean and Standard Deviation	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	missing
I would like to work for 12 months a year (I8) 3.248 1.888	47 7.3%	130 20.3%	200 31.3%	143 22.3%	120 18.8%	6
Teachers don't have a lot of problems with students (I9) 4.038 0.876	3 0.5%	34 5.3%	113 17.7%	275 43.0%	214 33.5%	7
My friends don't think I should be a teacher (I10) 3.083 0.903	39 6.1%	60 9.4%	409 63.9%	73 11.4%	59 9.2%	6
My family thinks I should be a teacher (I11) 3.335 0.968	26 4.1%	51 8.0%	344 53.8%	119 18.6%	99 15.5%	7
Teachers make a lot of money (I12) 3.567 1.042	17 2.7%	69 10.8%	236 36.9%	169 26.4%	148 23.2%	7
I would not mind working for just 9-10 months a year (I13) 2.466 1.086	102 16.0%	283 44.3%	157 24.6%	48 7.5%	49 7.7%	7

salary/money issue. The statement which drew the largest percentage of agreement in the Interest in Teaching instrument is "I want to make a lot of money"—94.1% strongly agree or agree. However, 43.3% strongly disagreed or disagreed with the statement, "Teachers get many salary raises," and 49.1% strongly disagreed or disagreed with "Teachers make a lot of money."

The following statements looked at one of the work conditions of a teacher—length of yearly work time. To the statement, "I would not mind working for just 9-10 months a year," 59.6% strongly agreed or agreed. A related statement, "I would like to work for 12 months a year," had 40.7% strongly disagreed or disagreed and 27.4% agreed or strongly agreed.

Statements which provide an indication of student perspective of teaching in general include: "I would like very much to teach children" had 28.7% agreed or strongly agreed, and 75.7% strongly disagreed or disagreed with "Teachers don't have a lot of problems with students." Seventy-seven percent strongly disagreed or disagreed with "I really don't want to work with people."

Statements which looked at potential influences in students' consideration of teaching as a career choice: 11.9% agreed or strongly agreed with "My family thinks I should be a teacher"; 20.4% disagreed or strongly disagreed with "My friends don't think I should be a teacher"; and 46% disagreed or strongly disagreed with "People don't think teachers are very important." About 21% agreed or strongly agreed with "Teachers get a lot of respect from students." Only 21% agreed or strongly agreed that "It would cost too much to go to college to become a teacher."

As the research (Erb, 1983; Campbell & Parsons, 1972) has indicated, career development and planning are important issues for the 11-13 year olds. Therefore, the

Table 3.4 **Students' Career Discussions**

Statement (variable name)	Very often	Often	Seldom	Rarely	missing
Do you think about what you will do when you are done with school (C1)	292 45.5%	230 35.8%	93 14.5%	27 4.2%	4
Do your teachers talk with you about careers, occupations, and jobs (C2)	38 5.9%	136 21.2%	252 39.2%	217 33.7%	3
Does your family talk with you about careers, occupations, and jobs (C3)	153 23.8%	252 39.2%	169 26.3%	69 10.7%	3
Do you and your friends talk about careers, occupations, and jobs (C4)	61 9.5%	183 28.6%	229 35.8%	167 26.1%	6

instrument included questions regarding the students' frequency (very often, often, seldom, rarely) of discussions and considerations of careers with significant individuals (teachers, parents, and peers). Table 3.4 presents the student responses.

Over 80% of the students reported that they thought very often or often about what their future plans may be. But only 26.9% reported that their teachers talked about careers, occupations, and jobs with any degree of consistency. Students (62.5%) reported that their family did talk with them about careers with a high degree of frequency and 61.1% indicated that they seldom or rarely talk with their friends about future plans.

A very large percentage of the students appeared to be concerned about their future prospects but indicated that only their families talked with them about options.

Teachers apparently do not spend time talking, in or out of class, about careers to students.

Quality of School Life Instrument

Epstein and McPartland (1976), developers of the Quality of School Life (QSL) instrument, purported that the quality of school life is affected by both the formal and informal structures of the school. The QSL instrument provides three subscales: Satisfaction with School (SAT), Commitment to Classwork (COM), and Reactions to Teachers (TCH). Satisfaction with School is an indication of students' general reactions to school. Student interest in the educational opportunities provided is measured by their Commitment to Classwork. Reactions to Teachers focuses on what students think of and believe about the teacher-student relationship. The total of the subscale scores provides the Quality of School Life (QSL) score, which is an overall indication of what students think and feel about their school. The higher the score in the subscales and the total score, the more positive the students are about their school/classroom environment. Table 3.5 presents the student responses to each of the statements in the Quality of School Life instrument.

Commitment to Classwork

The responses to the following statements contributed to the Commitment to Classwork (COM) subscale. Students generally have a positive commitment to classwork as illustrated by their responses to the following questions: "I daydream a lot in class" (66.1% false); "Most of the topics we study in class can't end soon enough for me" (52.8% false); "This term I am eager to get to . . . " (64.7% – all or most of my

Table 3.5a **Quality of School Life instrument (questions 1 - 7)**

Statement (variable name)	True	False	missing
In class, I often count the minutes till it ends (Q1)	378 59.0%	263 41.0%	5
I wish I could have the same teachers next year (Q2)	225 35.1%	416 64.9%	5
Most of the time I do not want to go to school (Q3)	289 45.1%	352 54.9%	5
Most of my teachers want me to do things their way and not my own way (Q4)	409 64.2%	228 35.8%	9
I hardly ever do anything very exciting in class (Q5)	322 50.3%	318 49.7%	6
My teachers often act as if they are always right and I am wrong (Q6)	282 44.2%	356 55.8%	8
I am very happy when I am in school (Q7)	321 51.4%	304 48.6%	21

classes); "The work I do in most classes is . . . " (32.4% – very important to me); "If I could choose to take any courses at all, how many of your present courses would you take?" (39.6% – all or more than half); "Work in class is just busy work and a waste of time" (52.9% indicated seldom or never).

However, students appeared to noncommittal to school or class work as they responded to the following: "The things I get to work on in most of my classes are . . . "

Table 3.5b **Quality of School Life instrument (questions 8 - 14)**

Statement (variable name)	True	False	missing
Most of my teachers really listen to what I have to say (Q8)	447 70.0%	192 30.0%	7
I daydream a lot in class (Q9)	209 32.9%	427 67.1%	10
Certain students in my classes are favored by my teachers more than the rest (Q10)	368 57.9%	268 42.1%	10
I like school very much (Q11)	265 42.5%	359 57.5%	22
Teachers here have a way with students that makes me like them (Q12)	337 53.3%	295 46.7%	14
Most of the topics we study in class can't end soon enough to suit me (Q13)	289 45.9%	341 54.1%	16
Most of my teachers do not like me to ask a lot of questions during a lesson (Q14)	188 29.5%	449 70.5%	9

(44.6% – OK) and "School work is dull and boring to me " (36.4% – sometimes). The "OK" and "sometimes" responses were the midpoints in the statements.

Students were negative in their commitment to classwork in the following context: "In class, I often count the minutes till it ends" (58.5% true); "I hardly ever do anything very exciting in class" (50.3% – true); and "In my classes I get so interested in an assignment or project that I don't want to stop work" (59.4% – never or hardly ever).

Students in the sample appear to recognize the potential value of an education but they are not excited by what they do in order to learn.

Reactions to Teachers

The results from the following statements contributed to the Reactions to Teacher (TCH) subscale. Positive reactions of students toward their teachers were noted in the following responses: "Most of my teachers want to do things their way and not my own way" (63.3% true); "My teachers often act as if they are always right and I am wrong" (55.1% false); "Most of my teachers really listen to what I have to say" (69.2% true); "Teachers here have a way with students that makes me like them" (52.2% true); "Most of my teachers do not like me to ask a lot of questions during a lesson" (69.5% false); "How would you rate the ability of most of your teachers compared to teachers in other schools at your grade level? My teachers are . . . " (51.7% – above and far above average); "Thinking of my teachers this term, I really like . . . " (54.1% – most or all of them); "This term my teachers and I are . . . " (70.9% – on the same planet or same wave length).

Negative reactions to teachers were indicated the responses to the following questions: "I wish I could have the same teachers next year" (64.9% false); "Certain students in my classes are favored by my teachers more than the rest" (57.9% indicate true); and "I feel I can go to my teacher with the things that are on my mind" (43.4% – never or seldom).

Table 3.5c **Quality of School Life instrument (questions 15 - 18)**

Statement (variable name)	N	Valid Percentage
This term I am eager to get . . . (Q15)		
All my classes	254	39.6
Most of my classes	164	25.5
About half my classes	108	16.8
One or two classes	95	14.8
None of my classes	21	3.3
missing	4	
How would you rate the ability of most of your teachers compared to teachers in other schools at your grade level? My teachers are . . . (Q16)		
far above average	78	12.3
above average	256	40.3
average	264	41.6
below average	17	2.7
far below average	20	3.1
missing	11	
In my classes I get so interested in an assignment or project that I don't want to stop work. (Q17)		
Never	77	12.0
Hardly ever	307	47.9
Quite often	239	37.3
Every day	18	2.8
missing	5	
Thinking of my teachers this term, I really like . . . (Q18)		
all of them	85	13.2
most of them	264	41.1
half of them	142	22.1
one or two of them	137	21.3
none of them	14	2.2
missing	4	

Table 3.5d **Quality of School Life instrument (questions 19 - 22)**

Statement (variable name)	N	Valid Percentage
The school and I are like . . . (Q19)		
good friends	52	8.2
friends	234	36.7
distant relatives	177	27.8
strangers	100	15.7
enemies	74	11.6
missing	9	
The work I do in most classes is . . . (Q20)		
not at all important to me	25	3.9
not too important to me	98	15.3
pretty important to me	307	48.0
very important to me	209	32.7
missing	7	
This term my teachers and I are . . . (Q21)		
on the same wave length	160	25.2
on the same planet	298	46.9
somewhere in the same solar system	125	19.7
in two differernt worlds	53	8.3
missing	10	
The things I get to work on in most of my classes are . . . (Q22)		
great stuff — really interesting to me	66	10.3
good stuff — pretty interesting to me	183	28.6
OK — school work is school work	288	45.1
dull stuff — not very interesting to me	79	12.4
trash — a total loss for me	23	3.6
missing	7	

Table 3.5e **Quality of School Life instrument (questions 23 - 25)**

Statement (variable name)		N	Valid Percentage
If you could choose to take any courses at all, how many of your present courses would you take? (Q23)			
	All of them	84	13.2
	More than half	172	27.0
	About half	231	36.2
	Fewer than half	115	18.0
	None of them	36	5.6
	missing	8	
I enjoy the work I do in class. (Q24)			
	Always	37	5.8
	Often	194	30.4
	Sometimes	302	47.3
	Seldom	69	10.8
	Never	37	5.8
	missing	7	
Work in class is just busy work and a waste of time. (Q25)			
	Always	20	3.1
	Often	74	11.6
	Sometimes	203	31.8
	Seldom	217	34.0
	Never	125	19.6
	missing	7	

Table 3.5f **Quality of School Life instrument (questions 26 - 27)**

Statement (variable name)		N	Valid Percentage
I feel I can go to my teacher with the things that are on my mind. (Q26)			
	Always	86	13.5
	Often	109	17.1
	Sometimes	165	25.9
	Seldom	134	21.0
	Never	143	22.4
	missing	9	
School work is dull and boring for me. (Q27)			
	Always	46	7.2
	Often	93	14.6
	Sometimes	235	36.9
	Seldom	183	28.7
	Never	80	12.6
	missing	9	

Satisfaction with School

The results from the following statememts formed the subscale Satisfaction with School (SAT). Statements which indicated student satisfaction include: "Most of the time I do not want to go to school" (54.9% false); "I am very happy when I am in school" (51.4% true); "I like school very much" (42.5% true); "The school and I are like . . . " (44.9% – friends or good friends); and "I enjoy the work I do in class" (46.7% – sometimes).

Though students do not mind being in school, they do not feel any particular kinship to the institution.

Summary of the Quality of School Life

The subscale and QSL scale totals are available in Appendix C. For the purposes of hypothesis-testing, the subscales and QSL scale were recoded into categorical variables of low (1), medium (2), and high (3) as defined by the developers (Epstein & McPartland, 1978). The recoding of the subscales also provided another means of analyzing the data in a more simplified manner.

Satisfaction with School was recoded as low if the score ranged between 0-1; medium (2-3); and high (4-5). Commitment to Classwork was recoded as low if the score ranged between 0-3; medium (4-6); and high (7-11). Reactions to Teacher was recoded as low if the score ranged between 0-3; medium (4-6); and high (7-11). The Quality of School Life was recoded as low if the score ranged between 0-8; medium (9-15); and high (16-27).

The recoded categorical Quality of School Life was the independent variable for hypothesis four and the dependent variable for hypothesis five. The recoded subscales and QSL scale are presented in Table 3.6.

There was a relatively even distribution across the recoded Quality of School Life (QSLgr) and the recoded subscales. The recoded Commitment to Classwork (COMgr) has a slight bimodal distribution: students were either committed to school work or they were not. The recoded Satisfaction with School (SATgr) skewed towards the low end: a greater number of students expressed dissatisfaction than satisfaction. The skew was toward the high category in the recoded Reactions to Teachers (TCHgr): a greater number of students felt positive towards their teachers than negative.

In summary, students responding to the survey react favorably toward their

Table 3.6 **Grouped Quality of School Life Scales**

Scale (variable name)		N	Valid Percentage
Quality of School Life (QSLgr)			
	Low	182	28.2
	Medium	231	35.8
	High	233	36.1
Commitment to Classwork (COMgr)			
	Low	227	35.1
	Medium	198	30.7
	High	221	34.2
Reactions to Teachers (TCHgr)			
	Low	171	26.5
	Medium	198	30.7
	High	277	42.9
Satisfaction with School (SATgr)			
	Low	264	40.9
	Medium	193	29.9
	High	189	29.3

teachers but are not satisfied with school, and they are split in terms of how they value what they do in school.

Dependent Variable

As the primary focus of the study was students' interest in teaching, students' responses to two statements (I2z and I14) in the Interest in Teaching as a Career Choice

instrument were used to create the Interest in Teaching scale. Table 3.7 presents the results of responses to the two statements.

The percentage of students indicating interest in teaching in the two statements was 10.9% stated "yes" in statement I2z (yes, maybe, no) and 17.0% marked "strongly agree" in statement I14 (strongly agree, agree, no opinion, disagree, strongly disagree). The Cronbach reliability alpha for the two statements was 0.8014. The correlation coefficient was 0.7935 between the statements. The correlation coefficient was not higher possibly because of the differences in the two sets of response options. Choices for statement I2z were "Yes," "Maybe," and "No." Respondents had a Likert-scale options to statement I14, with "No Opinion" as the midpoint. "Maybe," the midpoint in the former statement is not necessarily equivalent to "No Opinion" in the latter.

Table 3.7 **Interest in Teaching**

Statement (variable name)		N	Valid Percentage
I would like to become a teacher (I2z)			
	Yes	68	10.9
	Maybe	286	46.0
	No	268	43.1
	missing	24	
I would really like to be a teacher (I14)			
	Strongly agree	46	7.1
	Agree	64	9.9
	No opinion	219	34.0
	Disagree	120	18.6
	Strongly disagree	195	30.3
	missing	2	

Table 3.8 **Interest in Teaching Scale**

Variable	Scale	N of Boys	N of Girls	Total N	Valid Percentage
Very interested	1.00	11	29	40	6.4
	1.25	1	3	4	0.6
	1.50	4	17	21	3.4
	1.75	0	0	0	0.0
	2.00	17	29	46	7.4
	2.25	0	0	0	0.0
	2.50	0	1	1	0.2
	2.75	71	112	183	29.4
	3.00	1	0	1	0.2
	3.25	0	0	0	0.0
	3.50	0	1	1	0.2
	3.75	0	0	0	0.0
	4.00	33	35	68	10.9
	4.25	0	0	0	0.0
	4.50	42	30	72	11.6
	4.75	12	5	17	2.7
Not at all Interested	5.00	111	57	168	27.0
	missing			22	

2 cases were omitted from the onset because of missing values.

The analysis of the correlation coefficient was critical as the creation of a single dependent variable was used for the hypothesis testing phase of the study (McIver & Carmines, 1981). Therefore, the "Maybe" responses were recoded in relation to the response given to the statement, "I would really like to be a teacher." Then the recoded response to statement I2z and the response from statement I14 were averaged to form the Interest in Teaching scale used in the hypothesis testing (see Table 3.8). Missing responses to either statement excluded the case from the statistical analysis. Of the 622

Table 3.9 **Grouped Interest in Teaching Scale**

Variable	Scale	N of Boys	N of Girls	Total N	Valid Percentage
Very interested	1.00	33	78	111	17.8
	2.00	72	114	186	29.9
Not at all Interested	3.00	198	127	325	52.3
	missing			22	

2 cases were omitted from the onset because of missing values.

valid cases, 40 students (11 boys and 29 girls) indicated a very strong interest in teaching (1.0) on the scale. At the opposite extreme on the scale, 168 students (111 boys and 57 girls) indicated a very strong non-interest in teaching (5.0).

Table 3.9 provides the results of recoding the Interest in Teaching scale into categorical variables with "1.00" indicating very interested in teaching and "3.00" indicated not at all interested in teaching. The very interested group comprised 17.8% and the not at all interested group comprised more than half of the sample population (52.3%). The largest group was boys not at all interested in teaching.

Although the students' indication of interest in teaching is tentative and subject to change, 17.8% of the students expressed interest in teaching. As teaching was the only career measured in the study, other potential career options were not provided as alternatives and therefore were not assessed.

Summary

Chapter 3 provided a review of the research methodology and procedures, a description of the students who responded to the surveys, a frequency count of students responses to the survey questions, and a description of the scales.

A number of the questions in the Interest in Teaching instrument provided a "no opinion" response. At this time, it is uncertain as to what that response may mean to the student—no interest, never thought about the issue. Therefore, interpretability of the "no opinion" response may be suspect.

CHAPTER 4. FINDINGS

Introduction

The primary purpose of the study was to determine the relationship between interest in teaching as a career choice and the perception of school/classroom climate. A review of the literature revealed that it is possible that such a relationship is plausible (Osipow, 1990; Blau, 1988; Poole & Cooney, 1985) given that the classroom/school climate has been found to impact students in a variety of ways (Fraser, 1986) and that teachers can have an influence (Fielstra, 1955; Jantzen, 1981; Saxe, 1969). The hypotheses of the study were analyzed to determine whether prior findings are presently valid with 7th and 8th grade students.

Following the presentation of the hypothesis-testing results is a discussion of a statistical model that may be utilized to predict interest in teaching based on the data collected in the study.

Hypotheses

Based on the review of literature, the following research hypotheses were established:

Hypothesis One: There is a significant difference in the interest in teaching among the racial/cultural groups: more Caucasian students will express an interest in teaching as a career choice than students of color.

As indicated in the review of the literature (Alston, 1988; Zapata, 1988; Hawley, 1989), a large percentage of all teachers will be primarily Caucasian.

Hypothesis Two: There is a significant difference in the interest in teaching between males and females: more females will express an interest in teaching as a career choice than males.

The aforementioned projections also forecast that a large number of teachers will be female. The current trends of large numbers of female elementary teachers and relatively equal numbers of female and male secondary teachers will continue.

Hypothesis Three: There is a significant difference in the interest in teaching in the interaction between gender and cultural/ethnic groups: more Caucasian females will express an interest in teaching as a career than any other culture-gender group.

Projections suggest that it will continue to be primarily Caucasian females who will be choosing to enter the teaching profession.

Hypothesis Four: There is a significant difference in the interest in teaching among the different levels of perception of classroom/school experience: individuals who are interested in teaching will express a more positive classroom/school experience.

The review of the literature suggests that individuals who find congruence in the school environment will likely consider teaching as a career choice (Holland, 1973;

Chapman & Hutcheson, 1982; Schuttenberg, O'Dell, & Kaczala, 1990).

Hypothesis Five: There is a significant difference in the perception of classroom/school experience between students of color and Caucasian students: Caucasian students will express more positive classroom/school experiences.

Previous studies report that the students of color indicate a more negative experience in schools and classrooms (McCormick & Noriega, 1986; Brophy & Good, 1970; Burstein & Cabello, 1989).

Hypothesis Six: There is a significant difference in the reasons for interest in teaching between those who have an interest in teaching and those who do not.

Previous research finds that high school and college students who opt to enter teaching are more altruistic and have less concern for making a lot of money (Fielstra, 1955; Fox, 1961; Book, Freeman, & Brousseau, 1985). Therefore, it is reasonable to hypothesize that 7th and 8th grade students will also demonstrate similar qualities.

The study tested the following statistical (null) hypotheses:

Statistical Hypothesis One: There is no significant mean difference in interest in teaching among the racial/cultural groups.

Statistical Hypothesis Two: There is no significant mean difference in interest in teaching between males and females.

Statistical Hypothesis Three: There is no significant mean difference in interest in teaching in the interaction between gender and cultural/ethnic groups.

Statistical Hypothesis Four: There is no significant mean difference between interest in teaching and the perception of classroom/school experience.

Statistical Hypothesis Five: There is no significant mean difference in the perception of the classroom/school experience between Caucasian students and students of color.

Statistical Hypothesis Six: There is no significant mean difference in the reasons, motives, or opinions for interest or non-interest in teaching between those who express an interest in teaching and those who do not.

Results of Hypothesis Testing

Hypothesis One

There is no significant mean difference in interest in teaching among the various cultural groups. Table 4.1 provides the results of the ANOVA with Interest in Teaching scale as the dependent variable (1 = very interested in teaching and 5 = not at all interested in teaching) and Culture and Gender as the independent variables. The F-value for the main effect of culture is 0.973 with a probability of .434.

The result of the ANOVA indicates there was no statistical significant mean differences in the main effect of culture. Therefore, statistical hypothesis one can not be rejected.

The cultural groups in the study do not differ in their interest or non-interest in teaching as a career choice. Of the total 646 cases, there were 620 valid cases included in the analysis.

Hypothesis Two

There is no significant mean difference in interest in teaching between males and females. The results of the ANOVA are presented in Table 4.1.

The main effect of gender (F-value = 49.892) is statistically significant ($p < .05$). Therefore, the null hypothesis is rejected. Of the 646 cases, there were 620 valid cases were included in the analysis.

An examination of the frequency count of the Interest in Teaching Scale (see Table 3.8) substantiates the significant difference as there were more girls who indicated interest in teaching than boys and there were more boys who indicated not at all interested in teaching than girls.

Hypothesis Three

There is no significant mean difference in interest in teaching in the interaction between gender and cultural/ethnic groups. The results are presented in table 4.1.

The results of the ANOVA procedure indicated that the interaction between gender and cultural groups on the Interest in Teaching scale (1 = very interested and 5 = not at all interested in teaching) was not statistically significant ($F = 1.933$, $p < .05$). Therefore, the statistical hypothesis can not be rejected. Of the 646 cases, 620 valid cases were included in the analysis.

The results indicate that interest in teaching for the study population was gender-bound and was not influenced by culture. Furthermore, the results indicated Caucasian females were not any more likely to opt for teaching than any other gender-culture grouping.

Table 4.1 includes the cultural-gender group means for the purpose of

comparison. Certain gender-culture groupings are worthy of note as they were very strong in their non-interest in teaching (Asian males with a mean of 4.00, Black males with a mean of 4.52, and Native American females with a mean of 4.18). Caucasian females did have the lowest mean (3.08) which suggest that a greater number of Caucasian females did indicate interest in teaching than the other gender-culture groupings in the study.

Hypothesis Four

There is no significant mean difference between interest in teaching and the perception of classroom/school experience. The results of the data analysis are presented in Table 4.2.

The interest in teaching scale was utilized as an ANOVA requires a continuous dependent variable. The grouped Quality of School Life scale was utilized because ANOVA requires a categorical independent variable.

The ANOVA results indicated that there was a significant difference (F-value = 30.38, $p < .05$) between those who expressed an interest in teaching (Interest in Teaching scale) and their perception of their classroom/school environment (grouped Quality of School Life scale, where 1 = low and 3 = high). The test for homogeneity of variances was not statistically significant so that the condition of homogeneity was met. Therefore, the null hypothesis can be rejected. Of the 646 cases, 622 valid cases were included in the analysis.

The students who indicated an interest in teaching are in the QSL-high category, though the mean on the Interest in Teaching scale was 3.06 which is a relatively neutral stance. However, students in the QSL-low category did not express an interest in

Table 4.1 Analysis of Variance — Interest in Teaching by Gender and Culture

Source of Variation	df	Sum of Squares	Mean Squares	F-value	p
Main Effects	6	89.963	14.994	9.642	.000
Culture	5	7.563	1.513	.973	.434
Gender	1	77.588	77.588	49.892	.000
2–Way Interaction					
Culture x Gender	5	15.029	3.006	1.933	.087
Explained	11	104.993	9.545	6.138	.000
Residual	608	945.513	1.555		
Total	619	1050.506	1.697		

Group	N	Mean
Asian males	27	4.00
Asian females	35	3.34
Black males	14	4.52
Black females	9	3.17
Hispanic males	39	3.85
Hispanic females	26	3.35
Native American males	9	3.39
Native American females	10	4.18
White males	192	3.90
White females	190	3.08
Other males	21	3.68
Other females	48	3.11
Total	620	3.53

26 cases not included in the analysis because of missing values

The mean on the Interest in Teaching scale for each culture-gender group is shown.

1 = very interested in teaching
5 = not at all interested teaching

Table 4.2 **Analysis of Variance — Interest in Teaching by QSL-grouped**

Source	df	Sum of Squares	Mean Squares	F	p
Between Groups	2	94.29	47.15	30.38	.000
Within Groups	619	960.53	1.55		
Total	621	1054.82			

Group Means and Standard Deviations

Group	N	Mean	S.D.	
QSL-low	176	4.02	1.19	1 = very interested in teaching 5 = not at all interested teaching
QSL-medium	220	3.63	1.25	
QSL-high	226	3.06	1.28	
Total	622	3.53	1.30	

Scheffé procedure noted differences at the .05 level between all three groups
24 cases not included in the analysis because of missing values.

teaching as indicated by the mean (4.02) on the Interest in Teaching scale. Therefore, there was an indication that 7th and 8th grade students who have a more negative perception of their school/classroom environment were more likely to indicate a non-interest in teaching as a career choice.

Hypothesis Five

There is no significant mean difference in the perception of the classroom/school experience between Caucasian students and students of color. Table 4.3 shows the results of the data analysis.

Table 4.3 **Analysis of Variance — Quality of School Life by Culture**

Source	df	Sum of Squares	Mean Squares	F	p
Between Groups	5	990.417	198.083	4.26	.0008
Within Groups	617	29561.167	46.480		
Total	641	30551.584			

Group Means and Standard Deviations

Group	N	Mean	S.D.	
Asian	62	16.02	6.14	0 = low perception of classroom/school environment
Black	26	10.62	5.52	
Hispanic	69	11.35	6.57	
Native American	20	11.50	7.48	
White	395	13.31	6.92	27 = high perception of classroom/school environment
Others	70	12.53	7.23	
Total	642	13.11	6.90	

Scheffé procedure indicated the mean for the Asian group is significantly different from the means of the Black and Hispanic groups at 0.05 level.

4 cases are not included in the analysis because of missing values.

The Quality of School Life scale was used as the ANOVA requires a continuous dependent variable with a categorical independent variable.

There is a significant mean difference in how the various cultural groups perceive their classroom/school environment ($p < 0.0008$) as indicated by the QSL (0 = low and 27 = high). The test for homogeneity of variances was not significant so that the condition of homogeneity was met. Therefore, the null hypothesis can be rejected. Of the 646 cases, there were 642 valid cases included in the analysis.

An analysis with the Scheffé procedure was utilized to locate the groups that were significantly different. The results indicated that Asian students expressed more positive perceptions (mean = 16.02) of their school/classroom environment than Black (mean = 10.62) and Hispanic (mean = 11.35) students. Though not statistically significant, Caucasian students (mean = 13.31) were the next highest group in terms of their perception of school/classroom environment. The anticipated results as stated in the research hypothesis were not found as the difference did not exist between Caucasian students and the various groups of student of color.

Hypothesis Six

There is no significant mean difference in the reasons, motives, or opinions for interest or non-interest in teaching between those who express an interest in teaching and those who do not. Tables 4.4 through 4.10 provide the results of a stepwise discriminant analysis.

Discriminant analysis is the most appropriate for the testing of the hypothesis as it permits the examination for differences between two groups while analyzing simultaneously a number of independent variables (Hair, Anderson, & Tetham, 1987). The independent variables (statements 1 through 13 on the Interest in Teaching instrument) were continuous which is a prerequisite in using discriminant analysis. The dependent variable was the grouped Interest in Teaching scale which was categorical. Finally, discriminant analysis provides a predictive model for future use.

Of the 646 cases, 402 valid cases were included in the initial component of the discriminant analysis as performed by SPSS. One hundred six (106) cases expressed interest in teaching (group 1) and 296 cases were not at all interested in teaching (group

3). The 173 cases (group 2) were excluded from the analysis as the bipolar extremes approach was utilized. The remaining 47 cases with one or more missing values in the statements 1 through 13 and/or missing values in the grouped Interest in Teaching scale were also excluded from the analysis.

Table 4.4 provides the group means and standard deviations for groups 1 and 3. The values of each statement (I1 to I13) ranged from 1 for strongly agree to 5 for strongly

Table 4.4 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Group Means and Standard Deviations**

Independent Variables	Interested in Teaching		Not Interested in Teaching	
	Mean	S.D.	Mean	S.D.
(1) I would like to make a lot of money.	1.60	0.73	1.29	0.54
(2) Teachers get a lot of respect from students.	3.16	1.06	3.34	0.96
(3) People don't think teachers are very important.	3.41	1.08	3.26	1.05
(4) I would like very much to teach children.	1.78	0.72	3.98	0.94
(5) Teachers get many salary raises.	3.33	0.93	3.65	0.92
(6) It would cost too much to go to college to become a teacher.	3.15	1.23	3.33	1.00
(7) I really don't want to work with people.	4.49	0.72	3.98	0.98
(8) I would like to work for 12 months a year.	3.27	1.21	3.29	1.21
(9) Teachers don't have a lot of problems with students.	3.97	0.90	4.12	0.89
(10) My friends don't think I should be a teacher.	3.36	0.91	2.96	0.93
(11) My family thinks I should be a teacher.	2.74	0.97	3.70	0.92
(12) Teachers make a lot of money.	3.26	1.04	3.77	1.04
(13) I would not mind working for just 9-10 months a year.	1.96	0.82	2.74	1.15

disagree. The value of 3 was designated as no opinion.

Students in group 1 (interested in teaching), on the average, expressed agreement with "I would like to make a lot of money" (I1), "I would like very much to teach children" (I4), and "I would not mind working for just 9-10 months a year" (I13). Students in group 1, expressed disagreement with "I really don't want to work with people" (I7). Students in group 1, on the average, had no opinion in the remaining statements.

Students in group 3 (not at all interested in teaching), on the average, expressed agreement with "I would like to make a lot of money" (I1) and "I would not mind working for just 9-10 months a year" (I13). Students in group 3 expressed disagreement with "Teachers don't have a lot of problems with students" (I9).

The statement with the greatest amount of mean difference between the two groups was "I would really like to teach children" (I4).

Table 4.5 is the pooled within-group correlation coefficients which were calculated by averaging the separate covariance matrices for the two groups and then computing the correlation coefficients. The largest correlation coefficient (0.50305) was between the statements, "Teachers get many salary raises" (I5) and "Teachers make a lot of money" (I12). The next largest correlation coefficients were between: "Teachers get a lot of respect from students" (I2) and "I would like to teach children" (I4) (0.22061); "Teachers get a lot of respect from students" (I2) and "Teachers don't have a lot of problems with students" (I9) (0.22094); "My family thinks I should be a teacher" (I11) and "Teachers don't have a lot of problems with students" (I12) (0.22303); and "It would cost too much to go to college to be a teacher" (I6) and "I really don't want to work with people" (I7) (0.20362). The remaining correlation coefficients were less than .20.

Table 4.5 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Pooled Within-Groups Correlation Matrix**

Independent Variables	(1)	(2)	(3)	(4)	(5)
(1) I would like to make a lot of money.	1.00				
(2) Teachers get a lot of respect from students.	0.03	1.00			
(3) People don't think teachers are very important.	0.10	–0.15	1.00		
(4) I would like very much to teach children.	–0.08	0.22	0.03	1.00	
(5) Teachers get many salary raises.	0.05	0.15	0.06	0.05	1.00
(6) It would cost too much to go to college to become a teacher.	–0.04	–0.03	0.04	0.05	–0.05
(7) I really don't want to work with people.	–0.01	–0.05	0.02	–0.08	0.03
(8) I would like to work for 12 months a year.	–0.01	0.09	–0.01	0.04	0.03
(9) Teachers don't have a lot of problems with students.	0.02	0.22	–0.00	0.04	0.07
(10) My friends don't think I should be a teacher.	0.13	–0.09	0.04	–0.09	–0.03
(11) My family thinks I should be a teacher.	–0.09	0.13	0.02	0.19	0.10
(12) Teachers make a lot of money.	–0.02	0.13	0.03	0.03	0.50
(13) I would not mind working for just 9-10 months a year.	0.12	0.02	–0.02	–0.06	–0.06

(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1.00							
0.20	1.00						
0.02	0.02	1.00					
–0.02	0.04	–0.02	1.00				
0.03	0.02	0.04	0.08	1.00			
0.06	–0.03	0.10	0.01	–0.04	1.00		
–0.05	–0.03	0.02	0.12	–0.01	0.22	1.00	
0.06	0.01	–0.13	0.05	0.08	0.08	0.04	1.00

Table 4.6 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Unstandardized Canonical Discriminant Function Coefficients**

Variables	Function 1
(4) I would like very much to teach children.	0.9967392
(13) I would not mind working for just 9-10 months a year.	0.3043624
(11) My family thinks I should be a teacher.	0.1747725
(2) Teachers get a lot of respect from students.	–0.2057144
(7) I really don't want to work with people.	–0.1453581
(1) I would like to make a lot of money.	–0.1910675
(5) Teachers get many salary raises.	0.8606946E–01
(3) People don't think teachers are very important.	–0.8362635E–01
(10) My friends don't think I should be a teacher.	–0.9464100E–01
(12) Teachers make a lot of money.	0.7494841E–01
Constant	–3.241130

Therefore, all the independent variables (I1 to I13) can be included in the discriminant analysis as none of the variables were in strong linear combination with any of the others.

The unstandardized canonical discriminant function coefficients are displayed in Table 4.6. The unstandardized coefficients were used in a discriminant function to determine the separation between the two groups, students who are interested in teaching and those who are not. For the cases in the study, the discriminant score is determined by:

Discriminant score = (–0.19)(I1) + (–0.21)(I2) + (–0.08)(I3) + (1.00)(I4) + (0.09)(I5) + (–0.15)(I7) + (–0.09)(I10) + (0.17)(I11) + (0.07)(I12) + (0.30)(I13) + (–3.24)

The computation of the discriminant scores for all valid cases (408) in the study provides the classification table by which the accuracy of the classified cases is determined. Six cases were added to the computation of the classification table as cases with missing values for any of the independent variables (I6, I8, and I9) were included in the computation.

Table 4.7 presents the results of the classification. For the smaller group 1 (interested in teaching), the classification was 92.5% accurate. The larger group 3 (not at all interested) was 91.0% accurate. Overall, the classification results were 91.42% accurate. Therefore, the effectiveness of the discriminant function is very high. The group centroids were: Group 1 (–2.06841) and Group 3 (0.74071).

Table 4.8 shows the results of running a Means procedure on the discriminant

Table 4.7 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Classification Results**

Actual Group	Number of Cases	Predicted Group Membership 1	3
Group 1 interested in teaching	107	99 92.5%	8 7.5%
Group 3 not at all interested	301	27 9.0%	274 91.0%

Percent of "grouped" cases correctly classified: 91.42%

436 cases were processed.
28 had at least one discriminating variable missing.
408 cases used.

Table 4.8 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — ANOVA Table from the Means Procedure for the Discriminant Score**

Source	Sum of Squares	D.F.	Mean Square	F	P
Between Groups	607.8328	1	607.8328	599.5725	.000
Within Groups	411.5935	406	1.0138		
Eta = .7722		Eta squared = .5962			

scores as the dependent variable and the group membership as the independent variable. There was a statistically significant mean difference between the two groups as indicated by the F-value (599.5725, with degrees of freedom, 1 and 406). Therefore, the function is considered to be a "good" discriminant function in its ability to separate the two groups.

The canonical correlation is 0.7786 for the discriminant function. The squared canonical correlation is 0.6062, which indicates that the function accounts for 60.62% of the variance. The Wilks' lambda for the function is 0.3937 (chi-squared = 368.17, with 10 degrees of freedom and a probability < .05) which indicates the percentage of variance not accounted for by the function (39.37%). The eigenvalue is 1.53976 which is not indicative of a very strong discriminating function.

Tables 4.9 and 4.10 are the results of the stepwise variable selection executed on the valid cases in the study to determine which variables (statements from the Interest in Teaching instrument) contribute to differentiating between those who are interested in teaching and those who are not. The standardized discriminant coefficients in Table 4.9

Table 4.9 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Summary Table of Variables Remaining at Conclusion of Analysis**

Variables	Step Entered into Analysis	Wilks' lambda at conclusion of analysis	Standardized discriminant function coefficient
(4) I would like very much to teach children.	1	.45462	0.88441
(13) I would not mind working for just 9-10 months a year.	2	.42535	0.32526
(11) My family thinks I should be a teacher.	3	.41656	0.16265
(2) Teachers get a lot of respect from students.	4	.40990	–0.20334
(7) I really don't want to work with people.	5	.40547	–0.13350
(1) I would like to make a lot of money.	6	.40135	–0.11416
(5) Teachers get many salary raises.	7	.39834	0.07946
(3) People don't think teachers are very important.	8	.39648	–0.08860
(10) My friends don't think I should be a teacher.	9	.39476	–0.08710
(12) Teachers make a lot of money.	10	.39374	0.32526

Level of significance for all variables (p = .000)

provides information as to the relative importance and contribution of each of the variables. Independent variable (I4) was the most important variable in the discriminant function.

Table 4.10 shows the contribution (F-values) of each of the independent variables as well as the strength of the relationship (item-to-function correlation) between each of the independent variables and the function. The independent variable, "I would like to teach young children" (I4), provided the strongest relationship to the function. Other independent variables (those that contributed significantly to the function are mentioned) with positive correlations to the function were: "My family thinks I should be a teacher" (I11); "I would not mind working for just 9-10 months a year" (I13); "Teachers get a lot of respect from students" (I2); "Teachers get many salary raises" (I5); and "Teachers make a lot of money" (I12). The independent variables with negative correlations included: "I really don't want to work with people" (I7); "I would like to make a lot of money" (I1); "People don't think teachers are important" (I3); and "My friends don't think I should be a teacher" (I10).

The null hypothesis six can be rejected because the reasons or motives of students in considering teaching as a career choice were significantly different between those who expressed interest and non-interest in teaching—a statistically signficant mean difference exists. The results of the stepwise variable selection procedure indicate which reasons, motives, or opinions were significant. The unstandardized discriminant coefficients used in a discriminant function to compute the discriminant score can predict group membership with 91.42% accuracy. However, a caution in the interpretation of the results is necessary as the Test of Equality of the Group Covariance Matrices is statistically significant; that the groups' variances are not homogeneous.

Table 4.10 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Partial Multivariate F Values and Pooled Within-Groups Correlations between Discriminating Variables and Canonical Discriminant Functions.**

Source of Variation	Partial Multivariate F Value at Conclusion of Analysis	Item-to-Function Correlation (pooled) Function 1
(4) I would like very much to teach children.	292.7600	0.88266
(13) I would not mind working for just 9-10 months a year.	25.5850	0.25903
(11) My family thinks I should be a teacher.	5.7186	0.36983
(2) Teachers get a lot of respect from students.	8.8893	0.06513
(7) I really don't want to work with people.	4.2150	–0.19669
(1) I would like to make a lot of money.	2.9217	–0.18462
(5) Teachers get many salary raises.	1.0837	0.12046
(3) People don't think teachers are very important.	1.7824	–0.04776
(10) My friends don't think I should be a teacher.	1.7424	–0.15565
(12) Teachers make a lot of money.	1.0187	0.17357
(6) It would cost too much to go to college to become a teacher.	0.0973	0.04157
(8) I would like to work for 12 months a year.	0.1293	–0.01061
(9) Teachers don't have a lot of problems with students.	0.5688	0.01241

Students who expressed an interest in teaching were strongly motivated by their desire to teach young children. They indicated that their families think they should be a teacher. They were interested in the 9-10 months a year work condition. They believed that teachers get respect from students and that teachers make a lot of money and receive many salary raises. However, students expressing an interest in teaching were motivated by their desire to make a lot of money and disagreed with their friends about becoming a teacher and with people who don't think teachers are important.

Predictive Model

An underlying, major activity of the study was to determine whether or not it is possible to develop a statistical model which can be utilized to predict the possibility of an individual to choose teaching as a career choice based on the independent variables collected in the two instruments: Interest in Teaching as a Career Choice and the Quality of School Life instrument. Regression analysis has been the standard statistical technique used for such purposes and was conducted on the data collected in the study.

Regression Analysis

In order to determine the possibility of predicting the interest of 7th and 8th grade students in considering teaching as a career choice, a regression analysis was conducted. The regression analysis provides an opportunity to examine the relationship between interest in teaching and student perceptions of the school/classroom environment. The Interest in Teaching scale served as the dependent variable. The Quality of School Life

scale and the responses from the statements and questions in the Interest in Teaching instrument provided the independent variables. A stepwise regression analysis was used in order to evaluate the variables as they are entered into the equation.

The results of the regression analysis are presented in table 4.11. The analysis provided the following regression equation:

Predicted Interest in Teaching = (.701496)(I4) + (.198997)(I13) + (.147366)(I11) + (–.209468)(I1) + (.087945)(I12) + .248236

The significant regression coefficients developed from statements in the Interest in Teaching instrument included the following variables with their t-values and probability: (I4) "I would like very much to teach children" (t = 20.454, p = .0000); (I13) "I would not mind working for just 9-10 months a year" (t = 5.456, p = .0000); (I11) "My family thinks I should be a teacher" (t = 3.209, p = .0014) (I1) "I would like to make a lot of money" (t = –3.311, p = .0010); and (I12) "Teachers make a lot of money" (t = 2.321, p = .0207). The results indicated that the regression equation can account for 65.37% of the variance in the dependent variable. The variable (I4) has the strongest correlation to the dependent variable (0.7737), followed by the variable (I11) with a correlation coefficient of 0.4634.

Discriminant Analysis

The results of the regression analysis provided a very strong predictor equation. However, as the study was interested in a possible relationship between students' interest in teaching and their perceptions of the school/classroom environment (as measured by

Table 4.11 **Regression Analysis — Interest in Teaching Scale as Dependent Variable and Interest in Teaching Instrument and Quality of School Life as Independent Variables.**

Step	Multiple R	R Square	Beta In	Correlation	Variable
1	.7737	.5986	.7737	.7737	I4
2	.7922	.6276	.1743	.3315	I13
3	.8004	.6406	.1282	.4634	I11
4	.8058	.6494	–.0957	–.2338	I1
5	.8085	.6537	.0686	.2399	I12

Variable	B	SE B	BETA	SE BETA	PART	PARTIAL
I4	.701496	.034296	.662658	.032397	.581792	.703076
I13	.198997	.036473	.161186	.029543	.155188	.255007
I11	.147366	.045926	.104828	.032669	.091269	.153270
I1	–.209468	.063263	–.096444	.029128	–.094179	–.158037
I12	.087945	.037889	.068556	.029536	.066021	.111496
Constant	.248236	.211558				

Analysis of Variance

	DF	Sum of Squares	Mean Square	F	P
Regression	5	486.08	97.22	161.61	.000
Residual	428	257.47	.60		

the QSL scale), the regression analysis did not provide evidence to support the feasibility of a relationship as the QSL did not emerge as a significant unstandardized regression coefficient.

Therefore, a bipolar extremes approach of the discriminant analysis was used to further analyze the data. The use of the discriminant analysis is appropriate in situations where the regression analysis does not provide the anticipated results (Hair, Anderson, & Tatham, 1987). The bipolar extremes approach examines the extreme two groups and excludes the middle group(s) from the analysis. A stepwise discriminant analysis was used to determine the variables which were the most efficient in discriminating between the two groups of interest.

Of the 646 cases in the study, 305 cases were included in the initial component of the discriminant analysis performed by SPSS. Of the 305 cases, 80 cases expressed interest in teaching (group 1) and 225 cases were not at all interested in teaching. The remaining cases were excluded because of membership in group 2 or contained missing values in one or more of the independent variables.

Tables 4.12 through 4.18 provide the results of the discriminant analysis. The grouped Interest in Teaching scale (categorical) was the dependent variable. The Quality of School Life scale, responses from the Interest in Teaching instrument, and the demographic variables were the independent variables.

The group means and standard deviations are displayed in Table 4.12. With a few exceptions, which are noted, the range possible in the statements was 1 = strongly agree to 5 = strongly disagree. The variables with the greatest amount of mean difference (greater than 0.50) between the two groups (interested in teaching and not at all interested) included: Quality of School Life scale (QSL) (possible range 0 - 27); "I

Table 4.12 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Group Means and Standard Deviations**

Independent Variables	Interested in Teaching Mean	S.D.	Not Interested in Teaching Mean	S.D.
(G1) Boys	0.33		0.63	
(R1) Asian	0.06		0.12	
(R2) Black	0.03		0.04	
(R3) Hispanic	0.10		0.12	
(R4) Native American	0.01		0.04	
(R5) Caucasian	0.68		0.63	
(1) I would like to make a lot of money.	1.62	0.72	1.28	0.53
(2) Teachers get a lot of respect from students.	3.21	1.08	3.28	0.96
(3) People don't think teachers are very important.	3.40	1.12	3.28	1.05
(4) I would like very much to teach children.	1.78	0.71	4.04	0.92
(5) Teachers get many salary raises.	3.38	0.86	3.68	0.91
(6) It would cost too much to go to college to become a teacher.	3.26	1.20	3.33	1.03
(7) I really don't want to work with people.	4.53	0.69	4.03	1.00
(8) I would like to work for 12 months a year.	3.26	1.22	3.30	1.22
(9) Teachers don't have a lot of problems with students.	4.01	0.83	4.13	0.89
(10) My friends don't think I should be a teacher.	3.21	0.84	2.93	0.93
(11) My family thinks I should be a teacher.	2.73	0.89	3.68	0.93
(12) Teachers make a lot of money.	3.20	1.01	3.84	1.00
(13) I would not mind working for just 9-10 months a year.	1.90	0.76	2.77	1.15
(C1) Do you think about what you will do when you are done with school?	1.65	0.70	1.82	0.88
(C2) Do your teachers talk with you about careers, occupations, and jobs?	2.81	0.92	3.13	0.86
(C3) Does your family talk with you about careers, occupations, and jobs?	2.03	0.83	2.29	0.95
(C4) Do you and your friends talk about careers, occupations, and jobs?	2.65	0.96	2.90	0.93

Table 4.12 **(continued)**

Independent Variables	Interested in Teaching Mean	S.D.	Not Interested in Teaching Mean	S.D.
GPA	1.86	0.72	2.05	0.87
Extracurricular Activity Participation	1.35		1.38	
Lunch Program	2.61		2.67	
Mother's Education	2.81	0.90	2.83	1.00
Father's Education	2.96	1.01	2.92	1.03
QSL	16.86	6.19	11.48	6.66

would like to teach young children" (I4); "My family thinks I should be a teacher" (I11); "I would not mind working for just 9-10 months a year" (I13); "Teachers make a lot of money" (I12); and "I really don't want to work with people" (I7).

Less mean differences were found in the following: "Does your teacher talk with you about careers, occupations, and jobs" (C2) (range of scores was 1= very often and 4 = rarely) and "Does your family talk with you about careers, occupations, and jobs" (C3) (range of scores was 1= very often and 4 = rarely).

In general, both groups indicated agreement with "I would like to make a lot of money" (I1) and "I would not mind working for just 9-10 months a year" (I13). Both groups disagreed with "Teachers don't have a lot of problems with students" (I9). The one statement which had both groups moving in the opposite direction was "I would like very much to teach children" (I4).

Of the 80 cases in group 1, 32.5% were boys. Boys comprised 62.7% of the membership in group 3 (225 cases). Therefore, for every boy interested in teaching, there

were two girls who were interested, and the converse was true for those cases not at all interested in teaching.

Of the 80 cases in group 1, 6.25% were Asian, 2.5% Black, 10% Hispanic, 1.25% Native American, 67.5% Caucasian, and the balance, 12.5% were Other. Of the 225 cases in group 3, 11.56% were Asian, 4% Black, 11.56% Hispanic, 3.56% Native American, 63.11% Caucasian, and the balance, 6.21% Other.

Table 4.13 provides the pooled within-group correlation coefficients for all the independent variables. The largest correlation coefficient (0.52307) was between the statements, "Teachers get many salary raises" (I5) and "Teachers make a lot of money" (I12). There was a 0.45342 correlation between the mother's educational level and the father's educational level. Finally, there was a 0.31703 correlation between "Do you think about what you will do when you are done with school" (C1) and "Does your family talk with you about careers, occupations, and jobs" (C3). The remaining correlation coefficients were less than 0.30.

The unstandardized canonical discriminant function coefficients are displayed in table 4.14. The coefficients are used to determine the separation between the two groups. The discriminant score is determined by:

$$\text{Discriminant score} = (1.01)(I4) + (0.33)(I13) + (0.15)(I12) + (-0.28)(I2) + (-0.03)(QSL) + (0.61)(R1) + (-0.12)(I7) + (-0.18)(I1) + (-0.11)(I5) + (0.13)(C3) + (-0.11)(C4) + (0.10)(I11) + (-3.57)$$

The computation of the discriminant scores for all valid cases (407) in the study provides the classification table by which the accuracy of the classified cases is determined.

Table 4.13 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Pooled Within-Groups Correlation Matrix**

Independent Variables	(G1)	(R1)	(R2)	(R3)	(R4)	(R5)	(1)	(2)
(G1) Boys	1.00							
(R1) Asian	0.00	1.00						
(R2) Black	–0.01	–0.07	1.00					
(R3) Hispanic	0.05	–0.12	–0.07	1.00				
(R4) Native American	–0.05	–0.06	–0.04	–0.06	1.00			
(R5) Caucasian	0.05	–0.45	–0.45	–0.47	–0.23	1.00		
(1) I would like to make a lot of money.	–0.13	–0.01	–0.08	0.05	0.05	0.02	1.00	
(2) Teachers get a lot of respect from students.	–0.01	–0.11	0.04	0.03	0.03	0.02	0.10	1.00
(3) People don't think teachers are very important.	–0.02	0.06	–0.02	0.00	0.00	–0.07	0.08	–0.19
(4) I would like very much to teach children.	0.14	–0.12	–0.04	0.05	0.05	0.03	–0.07	0.21
(5) Teachers get many salary raises.	0.03	0.04	0.04	–0.03	–0.03	–0.01	0.03	0.11
(6) It would cost too much to go to college to become a teacher.	–0.05	–0.09	0.04	–0.08	–0.08	0.10	–0.08	–0.02
(7) I really don't want to work with people.	–0.08	–0.09	0.09	–0.07	–0.07	0.05	0.00	–0.02
(8) I would like to work for 12 months a year.	–0.01	0.07	–0.03	–0.12	–0.12	0.01	0.03	0.08

Table 4.13 **(continued)**

Independent Variables	(G1)	(R1)	(R2)	(R3)	(R4)	(R5)	(1)	(2)
(9) Teachers don't have a lot of problems with students.	–0.01	–0.18	0.02	0.03	0.04	0.09	0.06	0.21
(10) My friends don't think I should be a teacher.	–0.20	–0.06	–0.02	0.01	–0.01	–0.03	0.11	–0.04
(11) My family thinks I should be a teacher.	0.08	–0.02	0.01	–0.07	0.04	0.03	–0.11	0.11
(12) Teachers make a lot of money.	0.04	–0.01	–0.03	0.06	–0.11	0.07	0.03	0.13
(13) I would not mind working for just 9-10 months a year.	0.08	–0.04	0.04	0.07	–0.02	–0.02	0.13	0.07
(C1) Do you think about what you will do when you are done with school	–0.02	0.06	–0.01	0.07	0.11	–0.10	0.09	0.00
(C2) Do your teachers talk with you about careers, occupations, and jobs	0.01	0.04	–0.02	–0.11	0.03	0.04	–0.03	0.05
(C3) Does your family talk with you about careers, occupations, and jobs	–0.04	–0.08	–0.19	–0.05	–0.03	0.16	0.06	0.09
(C4) Do you and your friends talk about careers, occupations, and jobs	0.01	0.03	–0.18	0.12	0.02	0.03	–0.06	–0.10

Table 4.13 **(continued)**

Independent Variables	(G1)	(R1)	(R2)	(R3)	(R4)	(R5)	(1)	(2)
GPA	0.18	–0.24	0.08	0.18	–0.01	–0.01	–0.04	0.16
Extracurricular Activities	–0.03	0.10	–0.08	0.18	–0.06	–0.12	0.07	0.06
Lunch Program	0.00	0.01	–0.03	–0.26	–0.08	0.24	0.02	–0.09
Mother's Education	0.11	0.11	0.05	–0.14	–0.11	0.12	–0.00	–0.14
Father's Education	0.09	0.13	0.01	–0.22	–0.10	0.12	0.05	–0.07
QSL	–0.12	0.20	–0.08	–0.05	–0.09	–0.01	0.20	–0.28

Table 4.13 **(continued)**

Independent Variables	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(G1) Boys								
(R1) Asian								
(R2) Black								
(R3) Hispanic								
(R4) Native American								
(R5) Caucasian								
(1) I would like to make a lot of money.								
(2) Teachers get a lot of respect from students.								
(3) People don't think teachers are very important.	1.00							
(4) I would like very much to teach children.	–0.02	1.00						
(5) Teachers get many salary raises.	0.05	–0.02	1.00					
(6) It would cost too much to go to college to become a teacher.	0.07	0.07	–0.05	1.00				
(7) I really don't want to work with people.	0.03	–0.04	0.03	0.14	1.00			
(8) I would like to work for 12 months a year.	0.05	0.07	0.09	0.03	0.04	1.00		

Table 4.13 **(continued)**

Independent Variables	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(9) Teachers don't have a lot of problems with students.	–0.04	0.02	0.05	–0.03	–0.01	–0.02	1.00	
(10) My friends don't think I should be a teacher.	0.08	–0.07	0.04	0.02	0.00	0.05	0.07	1.00
(11) My family thinks I should be a teacher.	0.04	0.22	0.07	0.04	–0.04	0.13	–0.03	–0.10
(12) Teachers make a lot of money.	0.03	–0.00	0.52	–0.04	–0.03	0.06	0.15	0.06
(13) I would not mind working for just 9-10 months a year.	–0.03	–0.04	–0.10	0.04	–0.02	–0.15	0.05	0.08
(C1) Do you think about what you will do when you are done with school	0.11	–0.00	–0.02	–0.01	0.03	0.02	0.02	0.02
(C2) Do your teachers talk with you about careers, occupations, and jobs	0.07	0.06	0.03	0.07	–0.05	0.02	–0.02	–0.08
(C3) Does your family talk with you about careers, occupations, and jobs	0.02	0.03	0.01	–0.14	–0.02	0.01	–0.01	0.01
(C4) Do you and your friends talk about careers, occupations, and jobs	–0.04	0.09	–0.04	0.01	–0.02	0.10	0.01	–0.01

Table 4.13 **(continued)**

Independent Variables	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
GPA	–0.05	0.05	–0.02	–0.10	–0.06	0.00	–0.00	0.05
Extracurricular Activities	0.05	–0.03	–0.00	–0.07	–0.10	0.01	0.07	0.03
Lunch Program	0.06	0.03	0.08	–0.02	0.01	0.08	0.06	0.03
Mother's Education	–0.02	–0.03	0.10	0.06	0.03	–0.10	–0.06	–0.10
Father's Education	0.01	–0.04	0.15	0.12	0.04	0.02	–0.05	0.03
QSL	0.16	–0.18	–0.04	0.11	0.01	–0.20	–0.08	0.11

Table 4.13 **(continued)**

Independent Variables	(11)	(12)	(13)	(C1)	(C2)	(C3)	(C4)	(GPA)
(9) Teachers don't have a lot of problems with students.								
(10) My friends don't think I should be a teacher.								
(11) My family thinks I should be a teacher.	1.00							
(12) Teachers make a lot of money.	0.20	1.00						
(13) I would not mind working for just 9-10 months a year.	0.07	0.03	1.00					
(C1) Do you think about what you will do when you are done with school	0.03	0.02	0.13	1.00				
(C2) Do your teachers talk with you about careers, occupations, and jobs	0.06	0.04	–0.09	0.06	1.00			
(C3) Does your family talk with you about careers, occupations, and jobs	–0.04	–0.02	0.04	0.32	0.17	1.00		
(C4) Do you and your friends talk about careers, occupations, and jobs	0.06	0.02	0.08	0.24	0.07	0.29	1.00	

Table 4.13 **(continued)**

Independent Variables	(11)	(12)	(13)	(C1)	(C2)	(C3)	(C4)	(GPA)
GPA	0.09	0.06	0.19	0.19	0.00	0.13	0.11	1.00
Extracurricular Activities	–0.05	0.06	0.11	0.05	–0.04	0.05	0.07	0.15
Lunch Program	0.01	0.11	–0.07	–0.04	0.02	–0.00	0.00	–0.22
Mother's Education	0.06	0.03	0.00	0.03	0.02	–0.09	0.06	–0.18
Father's Education	0.03	0.07	–0.09	–0.02	–0.02	0.01	0.01	–0.19
QSL	–0.10	–0.10	0.07	0.03	–0.09	–0.09	–0.03	–0.21

Table 4.13 **(continued)**

Independent Variables	(Extra)	(Lunch)	(Mother)	(Father)	(QSL)
GPA					
Extracurricular Activities	1.00				
Lunch Program	–0.02	1.00			
Mother's Education	–0.26	0.19	1.00		
Father's Education	–0.10	0.19	0.45	1.00	
QSL	–0.01	–0.01	0.17	0.12	1.00

Table 4.14 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Unstandardized Canonical Discriminant Function Coefficients**

Variables	Function 1
(4) I would like very much to teach children.	1.0071910
(13) I would not mind working for just 9-10 months a year.	0.3273637
(12) Teachers make a lot of money.	0.1453361
(2) Teachers get a lot of respect from students.	-0.2750109
(QSL) Quality of School Life scale	-0.0291167
(R1) Asian	0.6115965
(7) I really don't want to work with people.	-0.1208560
(1) I would like to make a lot of money.	-0.1833222
(5) Teachers get many salary raises.	0.1072463
(C3) Does your family talk with you about careers, ...	0.1284962
(C4) Do you and your friends talk about careers, ...	-0.1128389
(11) My family thinks I should be a teacher.	0.1011271
Constant	-3.5665270

Eleven of the original twenty-nine independent variables were selected as the best discriminating predictors.

The canonical correlation is 0.8054516 for the discriminant function. The squared canonical correlation is 0.6487522, which indicates that the function accounts for 64.88% of the variance. The Wilks' lambda for the function is 0.3512478 (chi-squared = 310.74, with 12 degrees of freedom and a probability = .0000). The Wilks' lambda is also the percentage of variance not accounted for by the function (35.12%). The eigenvalue is 1.85, which is not indicative of a very strong discriminating function.

The results of the classification are shown in table 4.15. For the smaller group 1 (interested in teaching), the classification was 90.7% accurate; the larger group 3 (not at all interested in teaching), the classification was 90.6% accurate. Overall, the

Table 4.15 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Classification Results**

Actual Group	Number of Cases	Predicted Group Membership 1	3
Group 1 interested in teaching	108	98 90.7%	10 9.3%
Group 3 not at all interested	299	28 9.4%	271 90.6%

Percent of "grouped" cases correctly classified: 90.66%

436 cases were processed.
29 had at least one discriminating variable missing.
407 cases used.

classification results were 90.66% accurate. The groups centroids were –2.27170 for group 1 and 0.80771 for group 3. The results indicate that the effectiveness of the discriminant function is very high.

Table 4.16 provides the results of the Means procedure conducted on the discriminant scores as the dependent variable and the group membership as the independent variable. There is a statistically significant mean difference between the two groups as indicated by the F-value (665.9834). Therefore, the function can be described as "good" in differentiating between the two groups.

There is little difference in the percentage of accounted for variance between the regression equation (65.37%) and the discriminant function (64.88%). However, the discriminant function includes a wider variety of independent variables for predictive

Table 4.16 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — ANOVA Table from the Means Procedure for the Discriminant Score**

Source	Sum of Squares	D.F.	Mean Square	F	P
Between Groups	665.9834	1	665.9834	629.1734	.000
Within Groups	428.6947	405	1.0585		

Eta = .7800 Eta squared = .6084

consideration. A caution for interpretation of the function is necessary as the Test of Equality of the Group Covariance Matrices is statistically significant.

Tables 4.17 and 4.18 are the results of the stepwise variable selection executed on the valid cases in the study to determine which statements contribute to differentiating the two groups. The standardized coefficients in table 4.17 provides information as to the relative importance of the variables to the discriminant function. Independent variable (I4) is the most important to the function.

Table 4.18 shows the contribution (F-values) of each of the independent variables as well as the strength of the relationship (item-to-function correlation) between each of the independent variables and the function. The independent variable, "I would like to teach young children" (I4), provides the strongest correlation to the function. Other independent variables which have a positive correlation with the function include: "I would not mind working for just 9-10 months a year" (I13); "Teachers make a lot of money" (I12); Asians (R1); "Teachers get many salary raises" (I5); "Does your family talk with you about careers, occupations, and jobs" (C3); "My family thinks I should be a

Table 4.17 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Summary Table of Variables Remaining at Conclusion of Analysis**

Variables	Step Entered into Analysis	Wilks' lambda at conclusion of analysis	Standardized discriminant function coefficient
(4) I would like very much to teach children.	1	.43231	0.87688
(13) I would not mind working for just 9-10 months a year.	2	.40419	0.34839
(12) Teachers make a lot of money.	3	.39297	0.14551
(2) Teachers get a lot of respect from students.	4	.38076	–0.27195
(QSL) Quality of School Life scale	5	.37267	–0.19038
(R1) Asian	6	.36356	0.18486
(7) I really don't want to work with people.	7	.36068	–0.11211
(1) I would like to make a lot of money.	8	.35834	–0.10781
(5) Teachers get many salary raises.	9	.35657	0.09665
(C3) Does your family talk with you about careers, ...	10	.35506	0.11769
(C4) Do you and your friends talk about careers, ...	11	.35300	–0.10573
(11) My family thinks I should be a teacher.	12	.35125	0.09276

Level of significance for the variables (p = .000)

Table 4.18 **Discriminant Analysis — Bipolar Extremes of the grouped Interest in Teaching Scale — Partial Multivariate F Values and Pooled Within-Groups Correlations between Discriminating Variables and Canonical Discriminant Functions.**

Source of Variation	Partial Multivariate F Value at Conclusion of Analysis	Item-to-Function Correlation (pooled) Function 1
(4) I would like very much to teach children.	226.64	0.84318
(13) I would not mind working for just 9-10 months a year.	23.209	0.26513
(12) Teachers make a lot of money.	2.7601	0.20615
(2) Teachers get a lot of respect from students.	12.075	0.02071
(QSL) Quality of School Life scale	5.7513	–0.26711
(R1) Asian	6.1246	0.05700
(7) I really don't want to work with people.	2.3580	–0.17290
(1) I would like to make a lot of money.	1.9977	–0.18116
(5) Teachers get many salary raises.	1.2434	0.10831
(C3) Does your family talk with you about careers, ...	2.3279	0.09356
(C4) Do you and your friends talk about careers, ...	1.8498	0.08741
(11) My family thinks I should be a teacher.	1.0187	0.33811

Table 4.18 **(continued)**

Source of Variation	Partial Multivariate F Value at Conclusion of Analysis	Item-to-Function Correlation (pooled) Function 1
(9) Teachers don't have a lot of problems with students.	0.85784	–0.02092
(R2) Black	0.68655	–0.03148
(C2) Does your teacher talk with you about careers, ...	0.44534	0.07233
(3) People don't think teachers are very important.	0.43911	0.01114
(GPA) Grade Point Average	0.40099	0.11532
(8) I would like to work for 12 months a year.	0.31818	0.04797
(10) My friends don't think I should be a teacher.	0.29992	–0.06143
(Lunch) Lunch Program.	0.78405E–01	0.04759
(C1) Do you think about what you will do when you are done with school	0.57590E–01	0.04907
(R5) Caucasian	0.54446E–01	–0.04448
(FatherEd) Father's Education	0.40834E–01	–0.02633
(R4) Native American	0.30954E–01	0.03169
(R3) Hispanic	0.18956E–01	0.02566
(G1) Boys	0.11489E–01	0.21108
(MotherEd) Mother's Education	0.68843E–02	–0.00111
(6) It would cost too much to go to college to be a teacher.	0.22787E–02	0.01664
(Extra) Extracurricular Activities.	0.92965E–07	0.02154

teacher" (I11); and "Do you and your friends talk about careers, occupations, and jobs" (C4). Independent variables with negative correlations include: "Teachers get a lot of respect from students" (I2); Quality of School Life scale (QSL); "I really don't want to work with people" (I7); and "I would like to make a lot of money" (I1). (Only those independent variables which contributed to the canonical discriminant function are enumerated.)

Therefore, the discriminant analysis indicates that it is possible to differentiate between those who are very interested in teaching (group 1) and those who are not at all interested in teaching (group 3). In addition, it is feasible to use the predictor equation based on the unstandardized discriminant coefficients to identify prospective teachers.

Summary of the Predictor Model

The discriminant analysis provided a predictor model which included a wider variety of independent variables than the regression analysis. The fact that the discriminant analysis did not include the "middle" group may have contributed to the different outcome. Also, the discriminant analysis utilized the categorical Interest in Teaching scale while the regression analysis required the continuous Interest in Teaching scale.

Students who are interested in teaching want to teach children and work with people. They would not mind working for 9-10 months a year, believe that teachers make a lot of money and receive many salary raises, but are not motivated by money. They also have a positive view of the school/classroom environment and feel that teachers get respect from their students. Family influences are indicated as they believe

their families want them to be teachers and their families talk about future opportunities. Furthermore, they talk with their friends about future possibilities.

Summary

The study's hypothesis-testing rejected all but two of the six statistical hypotheses. The statistical hypotheses rejected essentially confirmed that previous findings are still applicable with the study's population. The critical statistical analysis accomplished is the establishment of a relationship between students' interest in teaching and their perceptions of the school/classroom environment as demonstrated in hypothesis 4 and the predictor model. The relationship in hypothesis 4 is not as originally expected but nonethless it did indicate that students with negative perceptions of school/classroom environment were not interested in choosing teaching as a possible career choice. Perception of the school/classroom environment, as measured by the QSL scale, was one of the significant variables in discriminating between students expressing interest in teaching and students expressing non-interest in the predictor model. In the model, the QSL scale had a slightly negative correlation with the function—high QSL score related to interest in teaching; low QSL score related to noninterest.

CHAPTER 5. CONCLUSIONS

Summary

The study's test of hypotheses found that, as a group of 7th and 8th graders from the survey sample: (1) none of the cultural groups have a statistical significant inclination to choose teaching; (2) boys were not likely to choose teaching as a career choice; (3) Caucasian females were not any more likely to choose teaching than any other cultural-gender group; (4) students who have low perceptions of school/classroom environment were not likely to choose teaching; (5) Asian students reported more positive perceptions of school/classroom environment than any other cultural group; and (6) the reasons or motives for choosing teaching were different for students who express an interest and those who express non-interest in teaching.

The first finding suggested the possibility that Caucasian students are not seeing teaching as a viable career choice any more than any other cultural group. Though the numbers of the teachers and individuals interested in teaching are mainly Caucasian, it may be more an indication of larger numbers than a tendency.

The second finding was that males are less likely to choose teaching than females suggests that 7th and 8th grade boys do not see themselves as a teacher. As many of their teachers have been primarily female since elementary school, boys have not had male

role models who might help them see males as teachers as a viable career option. Therefore, it may be suggested that females and males are still being socialized into viewing teaching as a female career.

The study found that Caucasian females were not any more likely to express interest in teaching than any other cultural-gender group (finding 3). Though it has been projected that many more teachers in the future will be Caucasian females, the findings of the study did not provide sufficient evidence to support the projection.

According to the data, there was a relationship between students' interest in teaching and their perception of school/classroom environment (finding 4). However, the relationship was a negative one since students who have negative perceptions of their school/classroom environment were not interested in teaching. But the Quality of School Life scale was a strong predictor variable in the discriminant analysis when all variables were considered in the development of a predictor model. Of the variables, the QSL had the third largest correlation with the discriminant function (–0.26711).

The fifth finding was Asian students reported having a more positive view of school than any other group in the study. The finding was unexpected as the review of literature did not uncover any previous research results that would indicate the outcome. However, it is not surprising as Asian students have performed well academically and teachers probably have high expectations of that group. Therefore, it can be inferred that Asian students would have more positive experiences in school and be more positive of the environment.

The sixth finding was that students who expressed an interest in teaching were different from those who are not in terms of their motivations and reasons. Students who expressed an interest in teaching indicated they would like to teach children. The result

was expected as previous research findings indicated that the desire to teach children is very strong among individuals who do enter teaching. Also, given the context of the survey, the statement should have differentiated the two groups of respondents. The variable also had the highest correlation to the discriminant function in the hypothesis-testing (0.88266) and the predictor model (0.84318).

The students in the survey indicated that they would not mind working for just 9-10 months a year had the second highest correlation to the discriminant function in the hypothesis-testing (0.25903) and the predictor model (0.26513). The finding is supported by previous research which looked at the motivation of females entering the teaching profession. In the predictor model, two out of every three students interested in teaching were girls and working for 9-10 months a year was a significant discriminating variable. Students interested in teaching are attracted by this working condition. With the advent of year-round schools, it will be interesting to determine whether students in these schools will respond in similar fashion as those in the study.

The influence of family was prevalent as students, interested in teaching, indicated that they believed their family thinks they should be a teacher in both the hypothesis-testing (0.36983 correlation to the function) and the predictor model (0.33811 correlation to the function). In the predictor model, the question, "Does your family talk with you about careers, occupations, and jobs?", was also a significant discriminating variable. None of the prior studies discerned directly the influence of family. However, studies indicated that some of the sex-related attitudes regarding careers and occupations may be learned in the home.

Making a lot of money was important to respondents expressing an interest and non-interest in teaching (slightly less important to those interested in teaching). Contrar-

ily, respondents not interested in teaching tended to disagree more than teachers make a lot of money and teachers get many salary raises. The results on the issue of money were inconclusive which is indicative of previous research in the area. However, in the discriminant analysis of the data for hypothesis six, the statement, "I want to make a lot of money," had a negative correlation to the function (–0.18462). The statement, "Teachers get many raises," had a correlation of 0.12046 and the statement, "Teachers make a lot of money," had a correlation of 0.17357. Therefore, respondents interested in teaching believed that teachers receive a large salary which was consistent with their desire to make a lot of money.

In the predictor model, the statement, "I want to make a lot of money," also had a negative correlation to the function in the predictor model (–0.18116). The other two statements had positive correlation to the function: 0.20615 for "Teachers make a lot of money" and 0.10831 for "Teachers get many salary raises." Therefore, the outcome of the discriminant analysis to develop a predictor model produced similar results to the aforementioned analysis.

Another significant variable was the statement, "I really don't want to work with people." In hypothesis six, the variable had a negative correlation (–0.19669) to the function. Though not a strong correlation, the result confirmed previous research that found teachers to have socially oriented personalities. The result was further confirmed in the predictor model where the variable had a negative correlation of –0.17290 to the function.

The major question posed in the study concerns whether or not there is a relationship between students' interest in teaching and their perceptions of the school/classroom environment. The question was primarily answered in finding 4 which indicated there

was a relationship between students' interest in teaching and their perception of school/ classroom environment as there was a significant mean difference in the analysis. The predictor model also found that the QSL scale was a significant discriminating variable in separating students who expressed interest in teaching and students who did not. Therefore, it can be concluded that such a relationship does exist.

Recommendations for Implementation

As a result of the study, the following recommendations are offered for implementation in programs and projects which are interested in the recruitment of prospective teachers; particularly, prospective teachers of color.

Since it is possible to identify 7th and 8th grade students who are interested in teaching, development and implementation of future teachers organizations for 7th and 8th grade students are feasible. The organization would be an opportunity to socialize formally prospective teachers, to help students clarify their attitudes about teaching as a career, to assist students in understanding the nature of the teaching profession, to offer opportunities for students to learn basic teaching skills which can be applied with their peers, and to provide opportunities to reinforce and strengthen their academic skills and knowledge.

Though not every student should become a teacher, the school/classroom environment should be positive and provide a rewarding learning experience for all students. Even if students do not become teachers, their attitudes about schooling experience will be transmitted to the next generation of students. Therefore, the entire

faculty and staff should be trained in strategies and techniques that will create a positive and friendly learning environment.

The results indicate that students were generally favorable to their teachers and that some were committed to and recognized the importance of school work that is done. However, students were generally not satisfied with their school experience. Therefore, in both in-service and pre-service training, teachers and prospective teachers need to develop the skills and knowledge in creating more rewarding and productive learning experiences for students. With students of color in particular, teachers need to become aware of their unique learning needs and learning styles in order to adjust and adapt their teaching styles. Curriculum adjustments are needed to include content which is relevant for more students. The issues addressed are embodied in the philosophy of multicultural education.

Results from the study found that students indicated their teachers do not talk very often about careers, occupations, and jobs with them. For 7th and 8th grade students who are in the throes of many changes and transition, discussions about their future are very appropriate and necessary. Though teachers today are feeling quite overwhelmed with the mandated curriculum and other external pressures related to academic achievement, opportunities to include and integrate exploration and discussion of careers in the curriculum should be encouraged and implemented. In addition, more instructional activities which can assist students in self-concept development are highly desirable. School counselors can be a valuable resource in providing career data and information.

As families in the study played an important part in the career development of 7th and 8th grade students interested in teaching, seminars should be conducted with parents and families to provide them with greater understanding what prospective teachers need

to enter the teaching profession and the skills to assist their child as s/he progresses through the educational process. Information on preparation for high school is also important as the transition to high school can be traumatic, socially and academically. For example, studies on at-risk students suggest that the first year in high school is a crucial juncture in determining whether or not a student will complete high school.

Finally, any program or project on the identification and recruitment of prospective teachers beginning with 7th and 8th grade students need to continue through the high school years. High school counselors should be alerted as to the incoming students who have expressed in pursuing a teaching career so that appropriate academic planning and guidance can be accomplished. Should more states choose to implement teacher testing programs as a criterion for certification or teacher education programs require standardized tests for entrance, students need to be adequately prepared to meet the challenges of becoming a professional educator, especially students of color.

Recommendations for Further Research

The study was primarily exploratory as no other studies have been conducted which examined for a relationship between interest in teaching and perception of the school/classroom environment. The results indicate that there is a possibility of such a relationship and further research should be conducted to substantiate the findings of the study. In addition, more in-depth ethnographic study is appropriate to include detailed examination of 7th and 8th grade students' conceptions of teaching, motives and reasons in their consideration of teaching, as well as other possible careers, and analysis of

students' classroom experiences and environment.

The study focused on 7th and 8th grade students in buildings which were configured accordingly. Future studies should consider 7th and 8th grade students in other grade configurations, e.g., 6th through 8th, 7th through 9th. An area not accounted for in the study is the philosophy and organization of the school which may have an impact on the school's environment. It is generally recognized that there are philosophies for the different grade configurations. These philosophies translate into practices and policies which directly impact students and their reactions to the total school experience.

The study should be replicated in other states to ascertain whether the study's findings can be substantiated. At best, the study describes a sample of students from the state of California which is not necessarily representative of students from other states.

In relation to demographic data, techniques need to be developed that can collect accurate and definitive information on students' socioeconomic status. In the study, socioeconomic status was essentially measured by school lunch program participation. The study attempted to collect information on parents' occupations and educational completion levels but the results were inconsistent and could not be used in the analysis. The issue of class can be a viable variable in analysis of data. In the study, class could have substantiated whether prospective teachers still emerge from the middle-class as previous studies have found. A corollary to the issue of class is the inclusion of information about the community in which the school is located. This data would provide an indication of potential external factors in students' consideration of career options.

Another demographic variable which needs further examination is culture/ethnicity. A small number of students self-reported that they consider themselves to belong to more than one cultural group (reported as "other" in the study). A number of

the schools' reported demographic data did not include such a category. As cultures continue to merge and as culture is a viable demographic variable for the purpose of data analysis, new categorizations of culture need to emerge which will more accurately reflect the heritage and experiences of respondents.

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APPENDIX A. QUALITY OF SCHOOL LIFE INSTRUMENT

Background

The instrument uses true and false items (questions #1-14), multiple choice items (with five options) (questions #15-23), and Likert-scale items (five point) (question #24-27). A point is ascribed for the appropriate response to each item as determined by the developers.

The Quality of School Life provides four scores: the Quality of School Life (QSL), which is a total of the subscales, with a range from 0 to 27 for the instrument; Satisfaction with School (SAT) subscale, with a range of 0 to 5; Commitment to Classwork (COM) subscale, with a range from 0 to 11; and Reactions to Teachers (TCH) subscale, with a range from 0 to 11.

The Satisfaction with School (SAT) subscale is defined as the "students' general reactions to school. Because school is a major part of youngsters' lives, students who are positive in their evaluation of life in school may be more likely to experience general well-being. They also may be more likely to behave in socially acceptable ways and help other students in the school setting" (Epstein & McPartland, 1978). The subscale is an indication of how student feel about school; the higher the score, the more positive the student is about school.

The Commitment to Classwork (COM) subscale is defined as the "level of student interest in classwork. Tasks and assignments are what makes school different from non-

school settings . . . 'the work' is what makes school school. Students who find class assignments and projects interesting and important may learn facts and concepts more completely, and may develop more positive attitudes toward learning" (Epstein & McPartland, 1978). The subscale is an indication of how students feel about what they do in school; the higher the score, the more positive the student is about what they do in school.

The Reactions to Teachers (TCH) subscale is defined as the "student evaluations of instructional and personal interactions with teachers. Student-teacher relationships may be the key to student acceptance of educational goals, student understanding of school procedures, differences in students' independent or dependent behavior, and attitudes toward authority in and out of school" (Epstein & McPartland, 1978). The subscale is an indication of how students feel about their teachers; the higher the score, the more positive the students feel about their teachers.

For the Quality of School Life scale, the higher the score, the more positive is the student's reaction to the total school environment. The instrument provides data on how students react to different aspects of school.

Other Uses of the Quality of School Life

A Teacher Corp project utilized the Quality of School Life instrument to ascertain the existing school climate of an elementary school (Johnson & Nussbaum, 1984). With this data, the project adjusted for the existing conditions in hopes of improving the school climate to foster the learning of children of low-income families.

Another study utilized the QSL to examine the relationship between student values and the values of the school as an institution, with the student's perception of the

school as a mediating variable (Craig, 1989).

The QSL has been involved in a study to assess fourth-grade students' beliefs about responsibility for successful, unsuccessful, and overall academic achievements (Wolf, Chandler, & Spies, 1980). The results indicated that the more positive the perception of school, as measured by the QSL, the more responsibility the students will assume for their academic achievement.

In a study focusing on delinquent behavior and school climate, the researchers concluded that the QSL "seems to be a fair measure of student affective response to the school" (Wright & Jesness, 1979, p. 15).

The aforementioned studies are examples of how the Quality of School Life instrument has been utilized.

The Quality of School Life instrument is available from:

The Riverside Publishing Company
8420 Bryn Mawr Avenue
Chicago, Illinois 60631

(800) 323-9540

APPENDIX B. FORMS

Enclosed are the forms utilized in the study:

- Letter to the Student
- Letter of Introduction to the School
- Consent Form
- School Profile Form

Letter to the Student

November 1991

Dear Student:

Your school has been selected from among the many schools in California to be involved in a research study. This study is interested in finding what 7th and 8th grade students, like yourself, think about teaching as a possible career and also what 7th and 8th grade students think about their school and classes.

Your participation in this study is greatly appreciated. Also, you should know that it is voluntary (you don't have to be involved if you don't want). Should you choose to be involved, you will be helping a great deal in giving valuable information that can help to make schools a better place. What you think matters!

There are no right or wrong answers to the questions asked in the surveys. I want you to answer the questions honestly.

Also, you should know that **your answers will NOT be shared with your teachers or your school.**

Thank you very much for being a part of this research study.

Sincerely,

Raymond E. Wong
Principal Investigator

Letter of Introduction to the School

October 7, 1991

Name of Principal
School Name
School Addres

Dear (name of principal):

One of the current issues in education is the *declining number of minority school teachers* and the increasing number of minority students as we approach the year 2000. I am conducting a **research study of 7th and 8th grade students** to determine whether these students are considering teaching as a possible career choice and how that relates to their perception of their classroom/ school experience.

Your school has been selected to be involved in this study from schools in California with only 7th and 8th grade students. Your school's participation will be greatly appreciated.

For the study, please select an equal number of 7th and 8th students, for a total of __, to whom two surveys will be administered. In addition, you are asked to assign a professional staff person, other than the classroom teacher, to administer the survey to ensure confidentiality. Also, it should be emphasized that student participation is voluntary.

Furthermore, students will be assigned a code number to ensure individual confidentiality and the results will be reported as an aggregate. **Individual schools will not be identified in the analysis and results.**

It is estimated that the surveys should take approximately 20-30 minutes to complete. Administration instructions will be provided.

The surveys, a self-addressed stamped label, and related information will be sent to you around November 1, 1991. Please administer the surveys and return them to me by November 15, 1991.

I will be calling in the next two weeks to answer any questions you may have, as well as to confirm verbally your school's participation in this study. Enclosed is a **consent form** that indicates, when signed, your willingness to have your students participate in this study. Please return it to me in the enclosed self-addressed stamped envelope by **October 25, 1991.**

Sincerely,

Raymond E. Wong
Principal Investigator

Enc: Consent Form
Self-addressed stamped envelope

CONSENT FORM
FOR PARTICIPATION
IN A RESEARCH STUDY

As the representative of (name of school), I am willing to have our students participate in your research study. Also, I will ensure that the following conditions are followed:

- Selection of an equal number of 7th graders and two classes of 8th graders for inclusion in the study.
- Assignment of a professional staff person, other than the classroom teacher, to administer the surveys.
- Assurance that student participation is voluntary.
- Assurance that the student responses are kept confidential.
- Provision of other related information about the students as requested (e.g., student lunch program participation data).

In turn, I am assured that:

- the results of the surveys will not be identifiable in the analysis or final report by school or by individual student.
- all the pertinent information for administration of the survey instruments will be provided by the principal investigator.

Signature_____ Date_____

Printed or typed name_____

Position_____

Name of Test Administrator, if different _____

School Address_____

City_____ State_____ Zip_____

Phone (area code/number) _____/_____

School Profile Form

In order to understand better the overall composition of your school, please answer the following questions:

What grades are configured in your school? Total school enrollment:

Lunch program participation: Partial Free

Total school enrollment by grade and gender and race/ethnicity:

	7th Grade		8th Grade	
	Males	Females	Males	Females
Asian/Pacific Islanders				
Blacks				
Hispanics				
Native Americans				
Caucasians				
Others				
Totals				

Total faculty and non-faculty:

	Professional or Professional staff by gender and race/ethnicity:		Non-Faculty or non-professional staff by gender and race/ethnicity:	
	Males	Females	Males	Females
Asian/Pacific Islanders				
Blacks				
Hispanics				
Native Americans				
Caucasians				
Others				
Totals				

Please provide a brief description of the neighborhood and community in which the school is located:

APPENDIX C. RESULTS OF THE QUALITY OF SCHOOL LIFE

The following pages provide the scores for each of the subscales and the overall Quality of School Life scale collected from 646 students.

Quality of School Life (QSL)

Total	N	Valid Percent
00	6	0.9
01	20	3.1
02	9	1.4
03	19	2.9
04	26	4.0
05	21	3.3
06	22	3.4
07	29	4.5
08	30	4.6
09	34	5.3
10	39	6.0
11	31	4.8
12	28	4.3
13	43	6.7
14	28	4.3
15	28	4.3
16	19	2.9
17	33	5.1
18	25	3.9
19	24	3.7
20	22	3.4
21	18	2.8
22	15	2.3
23	19	2.9
24	19	2.9
25	12	1.9
26	20	3.1
27	7	1.1
	646	100.0

Commitment to Classwork (COM)

00	34	5.3
01	50	7.7
02	70	10.8
03	73	11.3
04	74	11.5
05	74	11.5
06	50	7.7
07	46	7.1
08	54	8.4
09	38	5.9
10	41	6.3
11	42	6.5

Reactions to Teachers (TCH)

00	22	3.4
01	46	7.1
02	44	6.8
03	59	9.1
04	60	9.3
05	64	9.9
06	74	11.5
07	87	13.5
08	68	10.5
09	58	9.0
10	48	7.4
11	16	2.5

Satisfaction with School (SAT)

00	149	23.1
01	115	17.8
02	106	16.4
03	87	13.5
04	78	12.1
05	111	17.2

APPENDIX D. TOTAL SAMPLE AND SCHOOL POPULATION BY GENDER

	Sample			Total		
School	Boys	Girls	Total	Boys	Girls	Total
1	48	41	89	511	490	1001
2	56	59	115	457	443	900
3	57	43	100	471	442	913
4	20	31	51	265	255	520
5	38	37	75	334	290	624
6	52	50	102	510	531	1041
7	42	53	95	444	373	817
8	8	11	19	195	145	340
Total	321	325	646	3187	2969	6156
%	49.7	50.3		51.8	48.2	

APPENDIX E. TOTAL SAMPLE AND SCHOOL POPULATION BY CULTURE

	Sample							Total School Population						
School	A	B	H	N	C	O	Total	A	B	H	N	C	O	Total
1	3	9	19	2	33	22	89*	25	172	519	15	247	23	1001
2	8	0	1	3	97	6	115	70	20	151	6	650	3	900
3	23	2	5	2	57	11	100	271	18	54	0	564	6	913
4	3	2	8	5	29	4	51	6	13	147	9	345	0	520
5	6	0	3	7	53	6	75	34	15	25	6	544	0	624
6	16	12	13	0	46	15	102	195	219	146	23	458	0	1041
7	3	1	4	1	79	6	95*	20	233	213	0	351	0	817
8	0	0	17	0	1	1	19	0	0	340	0	0	0	340
Total	62	26	70	20	395	71	646	621	690	1595	59	3159	32	6156
%	9.6	4.0	10.8	3.1	61.1	11.0		10.1	11.2	25.9	1.1	51.3	0.5	

* total includes 1 case with missing datum.

A = Asian; B = Black; H = Hispanic; N = Native American; C = Caucasian; O = Other

APPENDIX F. SCHOOLS AND LUNCH PROGRAM PARTICIPATION

School	Sample				Total		
	Free	Reduced	None	Missing	Free	Reduced	None
1	28	14	40	7	315	85	601
2	11	9	81	14	215	22	663
3	4	3	90	3	0	0	934
4	13	5	31	2	205	16	301
5	8	3	22	42	219	25	406
6	13	4	82	3	151	40	852
7	11	5	74	5	216	29	572
8	17	2	0	0	300	46	0